

National University of Advanced Legal Studies, Kochi



**DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTERS OF LAWS (2020-21)**

ON THE TOPIC

**EFFECTIVENESS OF PORT STATE AUTHORITY IN PREVENTING VESSEL
SOURCE MARINE POLLUTION**

**Under The Guidance and Supervision Of
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DECLARATION

I declare that this dissertation titled, “**Effectiveness of port state authority in preventing vessel source marine pollution**”, researched and submitted by me to the National University of Advanced Legal Studies in partial fulfillment of the requirement for the award of Degree of Master of Laws in Constitutional and Administrative Law, under the guidance and supervision of Ms Arya P B is an original, bona-fide and legitimate work and it has been pursued for an academic interest. This work or any type thereof has not been submitted by me or anyone else for the award of another degree of either this University or any other University.

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AADITHYA LAKSHMI P

ABBREVIATIONS

1. IMO : INTERNATIONAL MARITIME ORGANISATION
2. UN : UNITED NATIONS
3. OILPOL : INTERNATIONAL CONVENTION FOR THE PREVENTION OF THE SEA BY OIL
4. MARPOL : THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS
5. AFS CONVENTION : THE CONVENTION ON THE CONTROL OF HARMFUL ANTI-FOULING SYSTEMS
6. BMW : MANAGEMENT OF SHIP BALLAST WATER AND SEDIMENTS
7. UNCLOS : UNITED NATIONS CONVENTION ON THE LAW OF THE SEA
8. ILC : INTERNATIONAL LAW COMMISSION
9. FOC : FLAG OF CONVENIENCE
10. UNCTAD : UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
11. EEZ : EXCLUSIVE ECONOMIC ZONE
12. MOU : MEMORANDUM OF UNDERSTANDING
13. PSC : PORT STATE CONTROL
14. PSCO : PORT STATE CONTROL OFFICER

LIST OF CASES

1. TORREY CANYON CASE (1967)
2. ASYA CASE (1948)A.C.351
3. NICARAGUA V. UNITED STATE 1986 I.C.J

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1. INTRODUCTION

The protection and preservation of the marine environs from vessel source marine pollution are major issues related to the ecology around the world. After some real incidents happened due to oil spills, the international community took this issue more seriously than before.

The ravage of the marine environment is one of the rationale behind climate change and freshwater scarcity as one of the most serious environmental concerns. It is a significant worry of the international community that the health of oceans and marine biodiversity are captiously affected by marine pollution, including marine debris (especially plastic), persistent organic pollutants, heavy metals and nitrogen-based compounds the marine and land-based sources, including shipping and land run-off. The pollution of the marine environment has many consequences. Oil pollution from shipping accidents is the most well-known due to several high profile accidents such as the Torrey Canyon (1967)¹, Amoco Cadiz (1987), Exxon Valdez

¹ The Torrey Canyon incident involved many states. While originally built in the US in 1959, the tanker was 'Jumboised' in Japan in 1964. It was registered in Monrovia and flew the Liberian flag, although it had never been to Liberia. It was owned by the Barracuda Tanker Company that maintained 'filing cabinet' offices in Hamilton, Bermuda, and Monrovia. The officer and crew were Italian. On its fateful voyage, the tanker had been chartered by British petroleum, laden with over 100,000 of Kuwait code oil and bound for

(1989), Erika (1999) and Prestige (2002). It is estimated by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) in 2008 that around 12 per cent of total marine pollution is through human activities. This is not, however, the primary source of vessel-source pollution. Instead, the daily discharge of oil and oily mixtures, noxious liquid chemicals, sewage, garbage and air pollution from ships is the main cause of long term damage to the marine environment. The United Nations Convention on the Law of Sea (UNCLOS) has designated the International Maritime Organization (IMO) as the competent international organisation to deal with vessel-source pollution. Under the patronage of the IMO, several conventions have been adopted to solve the issues above, such as the International Convention for the Prevention of Pollution from Ships (MARPOL) and the International Convention for the Safety of Life at Sea (SOLAS).

The shipping industry grew in a way that played a crucial role in the rise of international trade. It's valued that around ninety per cent of the world trade is carried out by fifteen thousand ships manned by one million seafarers from almost every country in the world. Today the capacity to hold things in the ship increased so that the trade volume increased from 2.5 billion tons to 7.5 billion tons between the years 1970 to 2006.

Like we say that there are two sides to a coin; the world economy and international trade were flourishing on one side. On the other side, the marine environment faced serious issues from the vessel source marine pollution. The term marine pollution is defined in the LOS Convention as:

"the introduction by man, indirectly or directly, of substances or energy into the marine

their refinery at Milford Haven, Wales. Torrey Canyon was considered to be very well equipped and manned Sonia Zaide Pritchard, Oil Pollution Control(Croom Helm,1987)

environs, including estuaries, which results or is likely to result in such harmful effects as harm to living resources and marine life, threats to human health, an interruption to marine activities, including fishing and other genuine uses of the sea, diminishing of quality for the use of seawater and reduction of amenities"². Marine pollution is divided into six categories based on the sources: land-based sources, seabed activities subject to national jurisdiction, pollution from the International Sea-Bed Area; dumping of waste at sea; pollution from or through the atmosphere; and pollution from vessels. Vessel-source pollution is largely from ship cargoes. This pollution from ships is either operational or accidental. It is estimated that the marine environment is polluted by about 5 million tons of oil, of which 47% is from ships. Operational pollution means it is the consequence of the method by which ships operate. More serious is the deliberate discharge from vessels at sea. According to BIRNIE, 3.5 tons of oil per annum are deliberately discharged from accidental spills globally - half from marine-based sources, mainly shipping³.

The effect on the marine environment by vessel source marine pollution concerns the international community. The international community and maritime organisations added detailed conventions to protect the marine environment from the vessel source marine pollution to solve the problem. And here comes the flag state authority. The vessel will be registered under a particular country, and they will have to abide by the laws and maritime regulations of that country where the vessel is registered. Here the flag state authority was unsuccessful in controlling the marine pollution from vessels as they have been overburdened with a lot of responsibility upon them and inefficiency of the flag of convenience to fill in the gap of the flag state, coastal states came into existence; However, they have full authority in the territorial sea, they still lack the environmental law which allows the innocent passage of foreign vessels and cannot do anything here. The International community understood that the flag state and coastal state could not make much difference in this problem. So that the international community and

² LOS Convention Art. 1(4). Text of the Convention in, inter alia: The Law of the Sea: Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index (United Nations, 1983). The Convention entered into force on 16 November 1994

³ PATRICIA BIRNIE, "Pollution and fisheries in the North Sea", in GEIR ULFSTEIN et al. (eds.), The regulations of fisheries: legal, economic and social aspects [proceedings of a European workshop] (1986) 200.

maritime organisation came up with a new concept, and that is the port state authority. They were given a lot of power about the safety of ships and the prevention of marine pollution. Again they can check any foreign ship whether they are following the rules and regulations set up by the international conventions. This comprehensive solution by the international community and maritime organisations successfully tackled the consequences in the marine environment from vessel-source marine pollution.

1.1 STATEMENT OF THE PROBLEM

There was incredible growth in the shipping industry and world economy; this uncontrolled growth creates a hitch in protecting the marine environment from vessel sources. The international community came up with a solution by giving a huge responsibility upon the flag state and coastal state. But they were unsuccessful due to the overburden of duties upon them. Then came the port state authority, and it filled the gap of both flag state and coastal state and was very effective in preventing the vessel source marine pollution.

So this study is all about the international conventions adopted by the international community. The drawbacks in flag state control and coastal state control. How effective and successful is the port state in controlling the vessel source marine pollution.

1.2 SCOPE OF STUDY

The research is to critically analyse flag state jurisdiction according to the United Nations Convention on Law of Sea and the international convention on the Prevention of Pollution from Ships(MARPOL 73/78). The analysis of flag state jurisdiction is based on the obligation of states to ensure the vessels that are registered to fly the flag are in compliance with the conventions so as to prevent pollution from vessel sources.

Coastal State jurisdiction is analysed against the competence of states to undertake measures to prevent pollution from vessels navigating within their maritime zones and on the high sea as provided in the LOS Convention. The analysis of port state jurisdiction is

based on the competence of state stipulated in the LOS Convention, MARPOL 73/78 for the prevention of vessel source marine pollution

1.3 OBJECTIVE

1. To examine the strategies adopted by international communities about vessel-source marine pollution.
2. To analyse the duties imposed upon the flag state and coastal state by the international convention in the context of vessel source marine pollution.
3. To study the effectiveness of port state control in reducing vessel source marine pollution

1.4 RESEARCH QUESTION

1. What all are the conventions adopted by the international community to protect the marine environment
2. What are the limitations in flag states and coastal states concerning the protection of the marine environment?
3. Whether the rules of port state authority are sufficient to tackle the vessel source marine pollution problem.

1.5 HYPOTHESIS

The international rules, including the convention on Port state authority, are sufficient to prevent vessel source marine pollution.

1.6 RESEARCH METHODOLOGY

The method used in the dissertation will be doctrinal methodology. For this research, some relevant primary data and secondary data were collected from official websites. To complete this research work, the researcher will do an extensive study with the help of documents, reports, books and research papers. The researcher will also use research materials available in electronic databases and other general websites when they may not be available in physical format.

1.7 PERIOD OF STUDY

The total period of the study is 4-5 month

1.8 LIMITATIONS

Limited resources and reliability of resources

1.9 OUTLINE OF THE STUDY

Chapter 1-Introduction

Chapter 2-International conventions dealing with vessel source marine pollution

Chapter 3-Overview of the flag state and coastal state in the context of prevention of vessel source marine pollution

Chapter 4-Port state jurisdiction and control in the context of prevention of vessel source marine pollution

Chapter 5-Conclusion

2 INTERNATIONAL CONVENTIONS DEALING WITH VESSEL-SOURCE MARINE POLLUTION

2.1 INTERNATIONAL MARITIME ORGANISATION

Several conventions are dealing with the vessel source marine pollution and

The international maritime organisation is one among the many conventions to deal with vessel source marine pollution. IMO is the specialised agency of the United Nations which came into existence in 1948. The main objective of this IMO is to provide a regulatory framework for the shipping industry.

IMCO was the first international Maritime organisation; However, it was a maritime organisation. Its primary objective was navigational safety which came into force in 1958 after this International convention for the prevention of the sea by oil(OILPOL) came. It has regulations on marine pollution and environmental protection provisions in the UN 1958 Marine Convention Act, which deals with fishing, conservation of the living resources on the high seas, the convention on High Seas and the convention on the continental shelf.

In 1973, IMO adopted MARPOL, which is the repercussion of 1960's catastrophic environmental disaster. Before MARPOL, a conference was held on Tanker safety and pollution in 1978 due to the 1970's tanker accident. Eventually, the 1978 protocol was adopted as a part of MARPOL 73/78 superseded the OILPOL convention.⁴

⁴ David Hughes, Tim Jewell, Jason Lowther, Neil Papworth, Paula de Perez, Environmental Law (1st ed, Oxford University Press 2002) p. 626

MARPOL deals with the prevention of vessel-source marine pollution. It regulates technical requirements and design of the vessels, give construction suggestions and necessary equipment for pollution prevention. It provides more details about the protection of the marine environment through certification surveys and inspections⁵. It regulates different types of vessel-source marine pollution in its annexed like oil-based maritime pollution, pollution by marine litter, marine pollution from chemicals, and pollution by wastewater. The major reasons for the vessel source marine pollution are being regulated in other IMO conventions such as the International Convention on the control of harmful Anti-fouling systems on ships⁶ (AFS Convention) International Convention for the control and management of ship's ballast water and sediments.

2.2 MARPOL 73/78

The International Convention for the Prevention of Pollution from Ships, 1973, as adopted by the Protocol of 1978, is one of the most significant international marine environmental conventions. It is considered an important convention to tackle the vessel source marine pollution at an international level⁷

There were many attempts done to prevent the vessel source marine pollution before the MARPOL came into existence. But those attempts never got a positive response and ended up being an attempt, and the main reason for this was the second world war⁸.

5 Ibid p. 628

6 <[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-\(AFS\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-(AFS).aspx)> accessed 2 April 2021.

7 Manfred Nauka and Geoffrey L. Holland, "The Role And Development Of Global Marine Conventions: Two Case Histories" (1992) 25 Marine Pollution Bulletin p. 74

8 Alan Khee-Jin Tan, Vessel Source Marine Pollution: The Law And Politics Of International Regulation (1st in, Cambridge University Press 2005) p. 107

The rapidly growing world economy added fuel to the demand for energy resources like oil which is one of the main reasons for the vessel source marine pollution. The need for these energy resources like oil eventually leads to traffic in the sea and tanker accidents⁹. Consequently, the UN took the first step to tackle this problem by holding an international Maritime conference in Geneva¹⁰ In 1948, this conference played a significant role in establishing the inter-Governmental Maritime Consultative Organization.

In London, a conference was held to prevent marine pollution from oil discharges, and this was during the establishment of IMCO. Here 23 countries attended the meeting, and the main agenda of this conference was the prevention of marine pollution from oil-based pollution. This conference was the outcome of growing public concern about the oil discharge from ships and its effect. At a later point in time, Oil Pollution Prevention Convention (OILPOL) came into force on July 26 1958.¹¹

The main provisions under OILPOL are it was prohibited to discharge oil into the sea within a 50 nautical mile coastal zone¹²; it requires ships registered in the territory of the contracting states to be equipped with definite pollution prevention facilities and establishment of facilities for the disposal of oily substances in the main port of the contracting states¹³. OILPOL also ordered the vessels to carry an oil record book, which needed the entry of details of oil discharges and authorities of a contracting state could inspect at the port of that

9 Ibid p.109

10 Mark Szepes, "MARPOL 73/78; The challenge of regulating vessel source oil pollution(2013)2 Manchester Law Review Crime & Ethics p.77

11 Emeka Duruigbo, "Reforming The International Law And Policy On Marine Oil Pollution" (2000) 31 Journal of Maritime Law and Commerce p. 69

12 Ibid p. 78

13 Gini Mattson, "MARPOL 73/78 And Annex I: An Assessment of Its Effectiveness" (2006) 9 Journal of International Wildlife Law and Policy p. 178

state¹⁴. Here OILPOL burdened all responsibility upon the flag state and ignored coastal state and port states jurisdiction in the prevention of vessel-source marine pollution¹⁵.

The Torrey Canyon accident, which happened to be the greatest disaster during 1967 relating to vessel source marine pollution, where around 120,000 tons of crude oil were leaked into the sea. To tackle this series of measures were taken by the IMO. It also tackled the environmental risk caused by routine operations, which were a bigger threat than accidental pollution¹⁶.

After the Torrey Canyon accident, a conference was held in London to address the concern relating to vessel source marine pollution. Seventy-three countries participated in the London conference raising their concern over the vessel source of marine pollution¹⁷. As a result, the international convention for preventing decay from ships (MARPOL 73) was adopted. It is more comprehensive includes all forms of vessels pollution. Furthermost of its technical requirements were regulated in different annexes 9f the convention, which added oils, chemicals, tanks and containers, and sewage and garbage¹⁸. MARPOL 73 was then modified by the Protocol of 1978 relating to the convention for preventing pollution from vessels on February 17 1978 (MARPOL 78). The modified convention by the Protocol of 1978 is collectively referred to as either MARPOL 73/78 or MARPOL. It came into existence on October 2, 1983¹⁹. Article 9(1) MARPOL 73/78 provides that MARPOL 73/78 superseded OILPOL 54 as between State Parties

14 David Michael Collins, "The Tanker'S Right Of Harmless Discharge And Protection Of The Marine Environment" (1987) 18 *Journal of Maritime Law and Commerce* p. 278

15 Parry Oei, "Oil Pollution And International Law: Singapore Experience With The New Law Of The Sea" (1999) 4 *Asia Pacific Journal of Environmental Law*

16 <<http://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx>> accessed 3 April 2021

17 Gerard Peet, "The MARPOL Convention: Implementation And Effectiveness" (1992) 7 *International Journal of Estuarine and Coastal Law* p. 277

18 Paul Stephen Dempsey, "Compliance And Enforcement In International Law-Oil Pollution Of The Marine Environment By Ocean Vessels" (1984) 6 *Northwestern Journal of International Law & Business* p. 539

19 Rebecca Becker, "MARPOL 73/78: An Overview In International Environmental Enforcement" (1998) 10 *The Georgetown International Environmental Law Review* p. 628

to both conventions upon its entry into force. State parties to OILPOL 54 but not to MARPOL 73/78 remained therefore bound by the former's provision.

Annexe I of MARPOL includes rules for the prevention of oil pollution both from accidents and operational reasons. It contains specific regulations for tankers. Double hull requirements, crude oil washing system, separated bulk tanks oil filtering equipment can be demonstrated as some of these requirements. In tallying, special marine areas are defined in Annex I for the prevention of oil pollution. The discharge of wastewater or bilge water into these areas is subjected to strict rules²⁰.

MARPOL Annex ii controls the conveyance of dangerous substances. The classes are divided according to the degree of damage caused by the discharge of hazardous substances into the sea. Expulsions of these substances are only permitted in port receptacles unless the concentration of a dangerous substance is diluted to the prescribed levels. Here the parties to the convention agree to provide reception facilities for the harmful substance to ship using its port.

MARPOL Annex iii deals with the regulation concerning preventing pollution by harmful substances carried by sea in the form. It also gives detailed regulations on the packaging, marking, labelling, documentation, stowage, and quality limitations. It is prohibited to carry harmful substances as marine pollutants in the International Maritime Dangerous Goods (IMDG) code²¹, apart from following the Annex²²

MARPOL Annex iii is all about the guidelines for the prevention of sewage pollution. So wastewater includes waste from ship toilets and animal transported sections. Here it prohibits the discharge of at least 12 nautical miles off-shore, and also, this Annex defines the specific marine area for the prevention of sewage pollution. It regulates the condition and form of the document to be given as an indicator of the ship's compliance with the rules.

MARPOL Annex V deals with the provisions which aim to prevent waste pollution from ships. Here the term garbage is defined as plastic, food waste, glass metal, packaging waste. Annexe V prohibit to disposal of plastic waste into the sea. Clearing many categories of garbage into the sea is either banned or subject to very strict exceptions.

20 "MARPOL 73/78" <<http://imo.udhb.tr/TR/19Marpol.aspx>> accessed 3 April 2021

21 "IMDG Code" <<http://www.imo.org/en/Publications/IMDGCode/Pages/Default.aspx>> accessed 3 April 2021.

22 Alan Simcock, "Shipping", Handbook On Marine Environment Protection-Science, Impacts and Sustainable Management (1st edn, Springer 2018) p. 121

2.3 OTHER IMO CONVENTIONS

The convention on the control of harmful Anti-fouling systems (AFS Convention) came into existence in 2008. The convention deals with the prohibition of injurious organotins in Anti-fouling paints used on ships. It establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. The AFS Convention requires its parties to forbid the application, re-application, installation, or use of Anti-fouling systems listed in Annex I of the convention, which provides a control list for anti-fouling systems.

One more important IMO convention is the international convention for controlling the management of ship Ballast water and sediments (BWM), which came into force in 2017²³. It is the first international agreement that offers legal and technical instruments to evaluate the risks posed by the transfer of organisms by ships. Usually, the BWM Convention intends to reduce the introduction of pathogens and non-native species into port waters and coastal ecosystems. It also establishes an inspection and enforcement regime.

The BWM Convention creates a two-stage process for ballast water management. The BWM Convention and its Annex and additional guidelines set out for separate elements integrated into ballast water uptake and release and special area requirements. The other responsibilities set out in the BWM convention relate to the notification, information provision, research and development, cooperation, execution, and compliance.

The Nairobi International Convention on the removal of wrecks was adopted in 2007 at an international conference held in Kenya and came into existence on April 14 2015. It provides the legal basis for States to remove shipwrecks that may have the likely to badly affect the safety of lives, goods, and property at sea and the marine environment²⁴. This convention is the very first convention concerning wreck removal. It mainly deals with the circumstances a shipwreck poses a navigational hazard, has the potential to damage the marine environment and the cost of

23<[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Control-and-Management-of-Ships'-Ballast-Water-and-Sediments-\(BWM\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Control-and-Management-of-Ships'-Ballast-Water-and-Sediments-(BWM).aspx)> accessed 5 April 2021.

24<<http://www.imo.org/en/About/conventions/listofconventions/pages/nairobi-international-convention-on-the-removal-of-wrecks.aspx>> accessed 5 April 2021.

removing wreckage. This convention provides a legal reason to require shipowners to remove wrecks and provides a legal opportunity for the counties themselves.

2.4 UNCLOS 1982

The third United Nations Conference on sea law was convened New York in New York in 1973. Later it was replaced by the United Nations Convention on the Law of the Sea²⁵. UNCLOS came into force on July 28 1996, and it was described at the time of its adoption as a constitution for the sea. It sets out rules and principles governing all ocean activ5, from navigation to fishing, including marine scientific research and deep seabed mining

UNCLOS also assign an obligation upon the states to protect the marine environment. UNCLO provides a broad framework of jurisdiction for regulating marine pollution. UNCLOS does not create a specific standard for pollution; rather, it elaborates the general principles and obligations and recognises that the particular standard will be implemented through other international instruments. UNCLOS divides marine space into jurisdictional zones and forms the basis for international cooperation among the state for protecting the marine environment. Under Part XII of UNCLOS deals with all sources of marine pollution, including pollution from ships land+based sources, pollution from seabed activities and pollution from the atmosphere. Furthermore, this part establishes a framework outlining which states have jurisdiction over ships that may pollute the marine environment and creates a safeguard for vessels accused of polluting.

UNCLOS allows the state to establish laws in their maritime zones giving effect to usually acknowledged International rules and standards recognised through the competent International organisation or general diplomatic conference. With regards to specific pollution control methods, UNCLOS avoided setting specific new standards. Therefore, UNCLOS included references to existing and future regulations of IMO. In this perspective, the convention was combined with reference requirements such as "applicable International rules and

²⁵<http://www.un.org/depts/los/convention_agreements/conventions_historical_perspective.htm#Third%20Conference> accessed 5 April 2021

standards", "internationally recognised rules", "International rules", and "commonly accepted International rules and standards."²⁶

3. OUTLINE OF THE FLAG STATE AND COASTAL STATE IN THE CONTEXT OF PREVENTION OF SHIP-SOURCE MARINE POLLUTION

3.1 CONCEPT OF FLAG STATE CONTROL

The term "flag State" is made up of two verses, each with a rich history and having been contrasted with denoting another yet significant concept. The commencement of the usage of the flag can be traced back to around 1000 BC, when the Egyptians first used versions of the flag for proof of identity. This usage of the flag prolonged to the other civilizations and ultimately came to be used on vessels also with the same reason of identification, and since the middle ages, has been used as a representation of a nation, a country. It gained prominence as ships initiated distancing more and more from their homeport. Hovering the flag has, out of practice, become an integral part of customary law.

In the *Asya Case* (1948) A.C. 351, it was ruled that a vessel not sailing under the flag of any State had no right to liberty of navigation. The ID mark of the flag, therefore, symbolizes the legal rule of the vessel on the seas and has become a need for the preservation of public order, be it in the territorial waters of coastal maritime States or on the high seas. The flag governs the point of responsibility and how and where a right can be enforced about that ship.

²⁶ "Implications of the United Nations Convention on the Law of the Sea for the International Maritime The organization" <<http://www.imo.org/en/OurWork/Legal/Documents/LEG%20MISC%208.pdf>> accessed 5 April 2021

Ultimately, the flag gained its appreciation with the codification of the usage under first the 1958 High Seas Convention and eventually in UNCLOS 1982.

Under Article 4 of the 1958 High Seas Convention, it is stated that:

Every State, whether coastal or not, has the privilege to sail vessels under its flag on the high seas.

Article 5 of the same Convention also stipulates, among other things, that:

Each State intends to fix the conditions [...] for the privilege to fly its flag...

The equivalent provisions of the above Articles are laid down correspondingly under articles 90 and 91 of UNCLOS 1982.

As for the meaning of State, or Statehood, it is contended that one of the earliest definitions bearing legal implication was given by Vitoria in *De Indis de Iure Belli* Reflections. A perfect community or State... is comprehensive in itself, that is, which is not a part of a public, but has its laws and its council and its magistrates, [...] The roots of the law of nations and the birth of the idea of Statehood can be traced to the treaty of Westphalia (1648)⁶, which ended the Thirty Years' War. Before that, the law of nations was mainly based on the European State system, marked by religious antagonism and conflicts. The Treaty of Westphalia was accepted by the European States, in an effort by the European powers to extravagant an outline that would recognize their right to function as self-governing and sovereign entities having certain political control, with the right to defend Freedom of religion and to reach a contract between neighbouring Countries on territorial boundaries.

The Treaty of Westphalia is thus the precursor to the system of nation-states and the development of the international system of law and relations between States, European and non-European States.

Thus, ships plying the seas used the flag to identify themselves to the sovereign States to which they belonged, and the States whose ships were navigating the seas were referred to as flag States. While all these developments were taking place on the land territories, another historical debate was being conducted during practically the same period on the status of the seas – the *mare liberum* versus *mare clausum* debate.

Ruling the seas had always been a wish cherished by the great maritime nations, and this wish was mainly driven by economic interests. To attack the Portuguese

monopolistic rule over the Indian Ocean and the very lucrative spice trade, the Dutch came forward with the doctrine of the Freedom of the seas through a Dutch lawyer, Grotius, in his well known 1609 publication *Mare Liberum*. According to Grotius, things that cannot be seized nor be subject to the enclosure may not become property, they are common to all, and their usage pertains to the entire human race. Through the Grotian view, therefore, navigation is free to all persons. This notion of the Freedom of the open seas thus gained recognition, despite the idea set forward by Selden in his *Mare Clausum* and propounded by the British at a certain moment to protect their exclusive dominion of the seas. The doctrine of *Mare Liberum* ultimately came to be seen as inevitable and of prime importance for the progress of trade and navigation and was included in the customs of nations and principles of international law.

The same British sea power which had at one point of the time rejected the notion of the freedom of the seas used its maritime superiority to champion the issue and soon was rallied by the other maritime powers to dominate the seas as Freedom was equated with *laissez faire* and this *laissez faire* played in their advantage.

Another important notion that also developed in parallel was the recognition of the coastal State's exclusive jurisdiction and control on its territorial sea for the protection of its security and other interests, although uniformity of views as to the breadth of the territorial sea was yet to be achieved.

The international community gradually recognized the importance of codifying these concepts of State practice customary international law of the sea and thus as from the 19th century there were several attempts made at codifying the law. Such attempts gained momentum with the institution of the International Law Commission (after that: ILC) under the UN Charter from 1947. The ILC detained its first session in 1949, having as one of its mandates the codification of the law of the sea. The invaluable work of the ILC on the law of the sea aspect thus set the foundation for the First United Nations Conference on the Law of the Sea (UNCLOS I) in 1958. One of the outcomes of UNCLOS I was the acceptance of the High Seas Convention 1958 whereby the "rules of the road" concerning, inter alia registration of ships and nationality, the obligations and rights of the flag States over ships registered under its flag were first laid down.

To elucidate and analyze the various duties of flag States to control their ships, it is crucial to first look at the nationality of ships and who exercises jurisdiction over them. Ships themselves cannot incur duties by international law as they are not matters of international law. It is as a substitute the flag State who endures the duty to comply with international law. Ships, therefore, merely derive their obligations and rights from the States whose nationality they have. Nationality of a Ship Traditionally, jurisdiction over a vessel is linked to its nationality and the flag that vessel flies is the representation of its nationality. Article 91 (1) LOSC offers: Every State intends to fix the circumstances for the grant of its nationality to vessels, the right to fly its flag, and the registration of ships in its territory. Ships that race the country whose flag they are eligible to hover. The right for Countries to confer their flag to a ship is therefore unconditional. The Only restriction that the LOSC makes is that "[t]here must exist a genuine link between the state and the ship". Unfortunately, there is no conclusive, universally accepted meaning of the "genuine link". Neither the LOCS nor the High Seas Convention nor the United Nations Registration Conventions effectively defines a genuine link. The current -elusive -situation has by contrast even been confirmed by the International Tribunal on the Law of the Sea (ITLOS).¹ Moreover, it is not determined what the concerns are if a genuine link is missing. Largely, it has to be said that efforts to define the "genuine link" have not been successful." State authorities have, so, traditionally refrained from challenging such a link. Hence, global efforts are rather made to define specific performance requirements for flag States than define the genuine link in a legally mandatory way.

B. Flags of Convenience

Almost every coastal States and some non-coastal States have their commercial ship fleet of some sort. Though, it is remarkable that the widely held ships hover the flags of comparatively few States. That does, yet, not specify that the shipowners are nationals of those States. The advantageous owners of the ships are very commonly not nationals presidents of the concerned flag State.² In 2009, the main ten open and international registries assembled 55 per cent of the world merchant shipping tonnage. Open registries, or as they are also called "flags of convenience registries", permits owners to register their vessels at low costs or to register substandard ships that would not comply with the requirements of a more stringent registry. In

addition, ship owners can move their ships between registries. Henceforth, suppose a ship does not comply with the requirements of specific environmental standards or safety. In that case, ship owners can easily move their ships to a less stringent registry that does not require fulfilling the standard in question. This process is called "reflagging". The permissibility and feasibility of reflagging, therefore, further undermine the effective operation of flag State jurisdiction. It must be stressed that the issue of substandard ships is not unique to open registries. They can be found under all registries – closed and open.

Yet, one must notice that the flag of convenience ships has been involved in numerous nautical tragedies. The regularity of their involvement is typically elucidated by poorly trained crews and a failure to implement guidelines by the flag State. The casualty rate for the convenience taskforce flag is significantly higher than that of the controlled fleet, as records of open registries show.

Exclusive Flag State Jurisdiction

The nationality of a ship is so vital because of the "notion of exclusive flag state jurisdiction". Under Article 92 (1), LOSC states that flag States have exclusive jurisdiction over their vessels, except in exceptional cases specifically provided for in international treaties or the LOSC. "Jurisdiction" in the LOSC means "power" or "competence" which might be exercised by a State's legislature (legislative jurisdiction), enforcement agencies (executive jurisdiction), or courts (judicial jurisdiction). It appears to be ostensible that if the flag State has special jurisdiction over its vessels, it must also exercise its jurisdiction to implement the international binding guidelines it is subject to. Even now, the High Seas Convention stated in Article 5 (1) that "the State must efficiently exercise its jurisdiction and control in technical, administrative and social matters over ships flying its flag. Notwithstanding the pronouncement to leave enforcement primary to the flag State, the LOSC contains a provision that appears to be a vital signal of displeasure with many flag States. Article 228 (1) LOSC articulates that if the flag State "has repeatedly ignored its responsibility to enforce the applicable international rules and standards effectively in respect of harms committed by its vessels", the port or coastal State does not have to hang up its proceedings against the vessel. Irrespective of that provision, one must state that the concept of "exclusive flag State jurisdiction" is binding as a general rule in the

LOSC. This paper will show significant exemptions to that general rule or various measures taken to bypass the important issues that come along with the concept of exclusive flag State Jurisdiction.

3.2 FLAG STATE JURISDICTION AND CONTROL

Flag in a ship symbolizes the nationality of that particular ship that particular country has authority and responsibility. So when a country lets a ship fly a Flag, they have to meet general requirements to ensure the safety of a vessel, including crewing antipollution standards, etc.

According to article 91 of UNCLOS, Every State shall fix the conditions for granting its nationality to ships, registering the vessels in its territory, and the power to fly its flag. Vessels have the State's nationality whose flag they are authorized to fly²⁷. There must be an open link between the State and the ship. So this article gives clarity between the ship's flag and nationality. But again, the term genuine link doesn't have any clarity. There are no specific elements to determine it and how this requirement should be enforced. There is no proper or globally accepted definition for the same in the High sea convention, UNCLOS or the United Nations Registration Convention

Every State shall issue vessels to which it has approved the right to fly its flag documents to that effect. And Article 92 says that

Vessels shall sail under the flag of one State only and, save in exceptional cases expressly as long as for in international treaties or this convention, shall be focused to its élite power on the high seas. A ship may not change its flag in the course of a journey or even though in a port of call and save in the circumstance of a real assignment of ownership or conversion of records.

2. A vessel that sails under the flags of two or more States, using them according to convenience, may not entitlement any of the nationalities in question concerning any other State and may be integrated to a ship without nationality.

²⁷ <https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf> accessed 20 August 2021

Flag states are vested with some rights and responsibilities on the high seas, territorial seas or internal waters. The duties include the domain of safety and the part of prevention and protection of the marine environment.

Article 94 of the UNCLOS explains the duties of flag state

1. Every State shall efficiently exercise its jurisdiction and control over ships flying their flag in administrative, technical, and social matters.
2. In specific each State shall:
 - (a) preserve a register of ships covering the names and particulars of ships flying its flag, except those which are excluded from usually accepted international regulations on the explanation of their trivial size;
 - (b) accept jurisdiction under its internal law over each ship flying its flag and its master, officers and crew about administrative, technical and social matters concerning the vessel.
3. Every State shall take such procedures for vessels flying its flag as are essential to ensure safety at sea with respect to, among other things, to:
 - (a) the equipment, construction and seaworthiness of vessels;
 - (b) the manning of vessels, the training of crews and labour conditions, taking into account the valid international mechanisms;
 - (c) prevention of collision, the maintenance of communications and the use of signals
4. Such measures shall include those necessary to ensure:
 - (a) that each ship, before registration and after that at appropriate intervals are surveyed by a qualified surveyor of ships and has onboard such charts, navigational equipment and instruments and nautical charts as are proper for the innocuous navigation of the vessel;
 - (b) that each vessel is in the custody of a master and officers who possess suitable qualifications, specifically in seamanship, navigation, communications and marine engineering, and that the crew is qualified in qualification and numbers for the type, size, technology and equipment of the vessel;

(c) that the master, officers and, to the degree proper, the crew are fully conversant with and required to notify the applicable international regulations about the safety of life at sea, the prevention of accidents, the prevention, reduction and control of maritime pollution, and the conservation of communications by radio.

5. In taking the procedures called for in paragraphs 3 and 4, each State must conform to normally accepted international regulations, measures, and practices and take any steps necessary to secure their observance.

6. A-State with strong grounds to believe that proper jurisdiction and control concerning a vessel have not been used may report the facts to the flag State. Upon acceptance of such a report, the flag State shall examine the matter and, if appropriate, take any action essential to remedy the circumstances.

7. Each State shall cause an investigation to be held by or before a suitably qualified person or persons into every maritime casualty or incident of navigation on the high seas involving a vessel flying its flag and causing loss of life or serious injury to nationals of another State or serious destruction to ships or installations of another State or the maritime environs. The flag State and the other State will work together to conduct any investigation detained by that other State into any such maritime casualty or incident of navigation.²⁸

UNCLOS also wants the State to protect marine, which is explicitly mentioned under Article 194 of UNCLOS. Under Article 194(1)

States will take, individually or jointly as appropriate, all procedures consistent with this convention that are essential to prevent, reduce and control pollution of the maritime environs from any source, using for the objective of the best practicable means at their disposal and follow

28 Supra note 27

their capabilities and they shall endeavour to go with their policies in this connection ²⁹. The State needs to deal with all sources of pollution of the marine environment. According to 194(3), (b)- pollution from vessels, in particular procedures for preventing accidents and dealing with emergencies, guaranteeing the safety of operations at sea, inhibiting intentional and unintentional discharges, and regulating the design, construction, apparatus, operation and manning of vessels³⁰; The UNCLOS wants the State to minimize vessel source marine pollution, and the same should be designed in such a way.

UNCLOS wanted the flag state to make domestic laws for the prevention of vessel-source marine pollution. The same should comply with the globally accepted international regulations and rules established through the competent International organization or general diplomatic conference. So UNCLOS, through Article 211 and 217 required to formulate national laws for the prevention of vessel-source marine pollution

It should remind that Article 211 is the key provision that controls pollution from ships as the authoritarian jurisdiction of flag states under the article relates to the regulation of all types of

29 ibid

30 Supra note 27

vessel-source pollution. Still, it can be said that Article 211 vigorously encourages the proliferation of national laws and regulations, as the various paragraph of the article reference the adoption of laws more than seven times. Under article 217 of the UNCLOS, States will guarantee compliance by ships hovering their flag or of their registry with relevant international rules and standards, well-known through the proficient international organization or general diplomatic conference, and with their laws and regulations accepted following this convention for the hindrance, reduction and control of pollution of the maritime environs from ships and shall accordingly accept laws and regulations and take other measures essential for their implementation and this article provides the jurisdiction for flag states to implement laws and rules to make sure it is followed by the vessels concerning the rules and regulations adopted by the state⁵.

In UNCLOS, there are many references about the "generally accepted international rules and standards "or "applicable International rules and standards ", and many of the conventions, most of them which are developed by IMO, contains these generally accepted international regulations, procedures and practices although there's no proper definition for this in UNCLOS, it is assumed that MARPOL is the primary source of international rules governing pollution from vessels.

The jurisdiction for flag states concerning the prevention of vessel-source maritime contamination is provided in the chief text of MARPOL 73/78 and its six annexes. In the 73/78, there are two general obligations to be followed by the flag State, and the first is that flag states should articulate national laws to influence MARPOL 73/78. They should exercise enforcement jurisdiction to levy legal and administrative sanctions on non-compliant vessels. The other six obligations that are to be followed about the prevention of marine environment from vessel-source pollution are the responsibility to regulate accidental discharge or operational discharge of oil from vessels; the duty to spot unlawful discharges from ships; the responsibility to conduct surveys to safeguard that vessel comply with laws on the prevention of contamination; the obligation to issue and recommend shipboard documentation; the commitment to ensure that harmful substances are properly packaged, labelled and stowed on board vessels; and lastly, the obligation to investigate reports of non-compliance by ships under their registry by other states.

Flag State Duties in the LOSC. The LOSC includes flag State duties in safety and the domain of protection and prevention of the marine environs.

LAW OF FLAG STATES

(a) Art. 94 of The LOSC sets out the duties of flag States in greater detail than previous conventions, remarkably the High Seas Convention. Firstly, Article 94 (1) states that every State is required to "effectively exercise its jurisdiction and control in technical, social matters and administrative over ships flying its flag." Though, the LOSC goes extra and recommends in the subsequent Paragraphs of Article 94 a responsibility of the flag State to preserve regular checks upon the seaworthiness of ships, to safeguard that crews are appropriately qualified, to conduct inquiries into shipping casualties, to effectively exercise jurisdiction and control over their vessels, to maintain a register of vessels, to take measures to ensure safety at sea about the construction, seaworthiness of vessels and equipment, the manning of ships, labour conditions and the maintenance of communication, the prevention of collisions and the use of signals. The formulation in Article 94 (3) LOSC that "[e]very State shall take such methods for ships flying its flag as are essential to safeguard safety at sea with regard, among other things, to [the following procedures]" indicates that the enumerated flag State responsibilities are non-exhaustive. The, so, leaves room for other flag State responsibilities resulting from different customary international law or international treaties.

b) Preservation and Protection of the Marine Environment

The LOSC also addresses the preservation and protection of the marine environment and establishes some flag State duties in this domain. It provides, among others, that there is a general obligation for States "to protect and preserve the marine environment". Moreover, states are required to take "all procedures that are essential to control, reduce and prevent pollution of the maritime environs from any source", including from ships hovering their flag. For that purpose, States have to ratify the essential laws and guidelines. Flag State enforcement of these environmental regulations is governed in Article 217 LOSC. The article underlines the duty of flag States again to ensure compliance of their vessels with international rules and standards.

Ships that do not comply have to be prevented from sailing. Paragraph 3 provides that flag States have to offer certificates issued according to international standards to their ships. It furthermore recommends that those certificates are to be accepted by other States "if not, there are strong grounds for trusting that the condition of the ship does not correspond considerably with the details of the certificates."

3.3 GENUINE LINK AND FLAG OF CONVENIENCE

A flag state has authority over the ship that flies the respective nation's flag. It is said in the UNCLOS that they have jurisdiction over these ships in the scope of international regulations, procedures, and practices. Necessary safety measures should be taken by the flag State concerning construction, equipment, seaworthiness, manning of vessels, labour conditions and the training of crews. In short, the UNCLOS and other international conventions assign some duties and rights to the flag State to implement the rules concerning preventing vessel-source marine pollution.

So the flag state has the upper hand over maritime safety and protection of the marine environment. Still, some pitfalls exist, especially in the efficient execution of genuine links and the idea of flag state convenience.

Under Article 91 of UNCLOS, it is mandatory to have a genuine link between a State and ship³¹ It can be understood from the wording of article 91 that; UNCLOS provides two basic conditions to define the ship's nationality. Flying flag is the independent condition, and it is stress-free to elucidate whether a vessel can satisfy this condition. On the other hand, the direct link is the subjective condition of the ship's nationality, which causes legal debates³².

So genuine link is an important condition concerning the nationality of the ship. Still, there is no clarity on what the real link denotes in the UNCLOS, and related convention highlights its need.

³¹ Supra note 27

³² Vincent P. Coglianti-Bantz, "Disentangling The Genuine Link: Enquiries In Sea, Air And Space Law" (2010) 79 Nordic Journal of International Law p. 402

All this ambiguity concerning the genuine link causes enough trouble for the controlling and registration process of the ship.

The flag of convenience (FOC) can be well-defined as The flag of any country letting the registration of foreign-owned and foreign-controlled ships under conditions which, for whatever reasons, are suitable and appropriate for the persons who are registering the ships³³. So this definition clearly says that the genuine link is not a matter of concern. The whole idea worsens, such as low management and registration costs, less discipline, and soft registration requirements³⁴.

The flag of convenience has got a lot of advantages which include the ship owners skipping the taxation and not complying with the requirements for the crew of the ship eventually this will reduce the cost of labour³⁵The flag of convenience also allows the ship owners to register the vessel which does not meet the registration requirements of rigorous State relating to the substandard ships. So the flag in a vessel will let the ship owners have the fiscal advantage, which increases the number of merchants using FOC. United Nations Conference on Trade and Development (UNCTAD) identifies Barbuda and Antigua, Bahamas, Cyprus, Bermuda, Isle of Man, Malta, Liberia, Marshall Islands, Panama, and St. Vincent and the Grenadines as the ten largest open and international registries in 2007 and composed of these ten countries flagged 53.7 percentage of the world fleet by deadweight tonnage³⁶.

The ambiguity in genuine link and emergence of the flag of convenience leads to failure of the flag state. However, the UNCLOS other international convention identifies flag states as the primary authority for protecting the marine environment. But the flag state cannot be blamed

33 K. X. Li and J. Wonham, "Registration Of Vessels" (1999) 14 The International Journal of Marine and Coastal Law p. 139

34 Ibid n. 115 p. 159

35 Awni Behnam and Peter Faust, "Twilight Of Flag State Control" (2003) 17 Ocean Yearbook p. 171

36 Z. Oya Özçayır, "Flags Of Convenience And The Need For International Cooperation" (2000) 7 International Maritime Law p.6

alone because the number of substandard ships has amplified quickly. In connection with this, catastrophic maritime mishaps have caused great damage to the aquatic environs.

The flag represents the nationality of a ship. By placing a vessel on its register, a State undertakes a flag State's national and international responsibilities about that vessel. Flag States have the main duty to safeguard that their vessels obey the standards acknowledged by the flag State under international law. The first two annexes to MARPOL are examples of such "international standards," reflecting their prevalent adoption by States. The LOSC states that penalties provided for by the laws and guidelines of flag States intend to be "adequate" in severity to discourage violations wherever they occur. Flag States create laws based upon international principles. One instance would be CDEM standards, which are standards for construction, design, equipment and manning, and operation of vessels.

Another example would be preventing accidents, dealing with emergencies, ensuring the safety of operations at sea, preventing both intentional and unintentional discharges. Flag States can also enforce laws and guarantee compliance. This can include providing that vessels or ships do not sail unless they are "seaworthy" or in good form to navigate. States can also guarantee that vessels carry necessary certificates and conduct periodic inspections. If a ship violates rules and standards, there is a duty to investigate and initiate action where necessary immediately. There is also a responsibility to inform the IMO and request States of the actions taken.

The flag States's enforcement jurisdiction is borderless and spreads to wherever the ship navigates. Inappropriately, flag States are frequently not main oceanic States but somewhat States with liberal tax regulations and a relatively light regulatory touch structured to make them attractive to ship owners. This combination of inadequate resources and expertise and a lack of political will often limit their willingness to initiate legislation and capacity to implement applicable environmental rules (see the case study of the Liberian Registry below). Less trustworthy operators register their vessels under the flags of such lenient States, leading to the "flags of convenience" issue in marine environmental trash enforcement. For filling the gap, coastal and port States have been given additional legislative and enforcement powers.

3.4 CONCLUSION

In the context of maritime safety and maritime pollution, flag State responsibilities are firmly fixed in international customary law. They have been framed in the 1982 UN Convention on the Law of the Sea and further detailed through various well-ratified and usually acknowledged instruments. The remaining tasks are more practical than legal manner. Further implementation, self-assessment and audit are therefore necessary. The main necessity today is to enhance enforcement. A main step in the right direction has been the noticeable shift towards enforcing relevant international guidelines and standards by non-flag States, notably through Port State Control. There are even indications of a further shift from exclusive flag State jurisdiction importance towards greater port State jurisdiction. One instance is certainly the creation of the "White List" of the STCW Convention parties. Therefore, in the future, certificates of non-White List States will not easily convince port State inspectors anymore. 'It is doubtful whether or not it is legitimate not to recognize the flag of a ship registered in a State of non-compliance. Largely, the legal uncertainties are considerable and, in the author's opinion, prevailing. Yet, as an alternative, it appears to be a suitable and effective measure in general to reject port access to vessels that sail under the flag of a State that does not meet the criteria essential by mandatory IMO instruments. Port States could base their refusal on the dismissal of the flag State's certificates. It would be credible that the IMO issues a "Black List" for that purpose, listing non-compliant States. This sanction would go in a similar direction as the non-recognition of a vessel's flag but probably encounter fewer legal objections. The European Union already bars substandard ships under certain conditions from entering their ports. This legislation has been continued to adopt the Third Maritime Safety Package on 11 March 2009, which continues with the ERIKA I and II packages. It is to be anticipated that collective refusal of access to ports will eventually prevent the need for substandard ships to sail across at all as they would have no place to go anymore. Another growth, coming from a very different angle, could also help to improve the State. On March 30th 2010, French oil multinational Total went astray in their appeal to overturn a court pronouncement that found the company remorseful of neglect for a 1999 oil spill off the coast of Brittany. Paris' appeals court refused their case and established the conviction and a fine of 375,000 Euros. The inferior oil tanker Erika broke in two on 12 December 1999, contaminating 400 kilometers of coastline. Then Total was not the only party held legally responsible in this case. Along with Total, the shipowner of the Erika, the technical director and, maybe even more importantly, the Classification Society RINA was sentenced. The

court of appeal also pronounced that the three latter defendants had to pay 200 million euros of damages for the damage they caused to the environment. RINA was also fined 375,000 euros. These severe penalties and the enormous amount of damages awarded show it can be very costly to operate a substandard ship or, in the case of RINA, to certify a substandard vessel to be seaworthy. It is therefore conceivable that more similar civil and criminal verdicts of domestic courts could have an effect on the willingness to operate such ships. Moreover, proceedings before an international tribunal of one or several States against a flag State that consistently fails to obey its international duties could more contribute to the meaning of the scope of flag State duties and disclose reasonable sanctions. In the fisheries sector, though, the situation is more complicated. The problem here is not only of practical manner. On the contrary, it is essential to provide additional legally binding regulations. The main problem continues to be that there are no globally agreed minimum standards of flag State responsibilities. Although standards exist, such as the Compliance Agreement or the UN Fish Stocks Agreement in conjunction with various RFMO measures, many countries still refrain from ratifying these important instruments. However, a breach of duty is only determinable if the duty itself is standardized. Hence, there are international initiatives underway to develop flag State responsibilities further. In 2008 March, an "Expert Workshop on Flag State Responsibilities" was held in Vancouver. The chief goal of the Workshop was to develop criteria for flag State performance regarding fishing vessel control. Furthermore, the Workshop attempted to develop measures that could be taken if a flag State does not comply with its obligations. One commendation of the Workshop was that more consideration should be given to the motivation for vessel owners when they 're-flag their vessels. In this background, the FAO's efforts to develop a Global Record of Fishing Ships was cherished. Such a record should offer information about owners and operators, beneficial ownership, and soon. That information would be hugely useful to combine knowledge about flag State Control. In common, there is a need for better and more data to analyze further and solve the flag State control issue. It is also hard to assess whether collective or unilateral action against non-compliant vessels or States is preferable. Unilateral actions certainly have the advantage of being easier to decide and implement (at least in the State's EEZ and in the territorial water). Whereas collective actions promise more effectiveness. Furthermore, there is a need to define an objective valuation process through self-assessment or third-party assessment. Assessment of breach is a compulsory prerequisite for taking actions against non-compliant vessels (or States).

Therefore, it is essential to decide who undertakes the assessment, what effects or consequences a valuation would have, and who would proceed the activities following the valuation.⁸¹ Lastly, the ratification of the UN Fish Stocks Agreement should be further promoted. Article 8 declares RFMO measures mandatory even for non-member States. This is a dominant tool in the match against IUU fishing. If the Agreement is ratified by an adequate amount of countries, and State practice remains to tolerate non-flag State enforcement in this area, a new customary international law rule backing up this procedure could eventually evolve.

3.5 COASTAL STATE JURISDICTION AND CONTROL

Under the United Nations Convention on the Law of the Sea (from now on, UNCLOS Convention) Part XII for the preservation and protection of the marine environment from such pollution. This regard will analyze the coastal State's right to regulate and enforce ship source pollution under international law.

International law recognizes navigation as liberty and a right of a flag State, yet limits in varying degrees the operation of ships in the maritime areas of a coastal state.³⁷

In the internal waters, the coastal State enjoys sovereignty, and foreign vessels enjoy in principle no right of navigation. They are subject to the jurisdiction of this State's courts and its legislative and enforcement jurisdiction.³⁸

The Coastal States also claim authority over the territorial sea, generally characterized as sovereign. The jurisdiction extends specifically to exclusion or regulation of passage by foreign vessels, prescription and application of law to practically all activities within the area, and exclusive exploitation of resources. The major opposing claim on behalf of all States in the territorial sea is customarily expressed in a right of innocent passage.³⁹

Beyond the territorial sea, all vessels enjoy, in principle, Freedom of navigation. However, the coastal State has sovereign rights over the natural resources within the EEZ and jurisdiction over the preservation and protection of the marine environment.

37 Dupuy, R.J and Vignes, D.A. A Handbook on the Law of The Sea; Martinus Nijhoff Publishers (1991) at pp.20-23

38 Haijiang, Y. 'Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea' Springer Berlin – Heidelberg (2006) at pp. 10 - 17

39 Ageing, K. 'Theory in search of practice: "The right of Innocent Passage in the Territorial Sea" Cornell Law School (2005) at p. 7 - 8

The following sections observe UNCLOS on various topical issues related to the environment to create a comprehensive narrative.

'Pollution' under the Law of the Sea Convention of Article 1 (4) of UNCLOS defines pollution as [the introduction by fellow, directly or indirectly, of materials or energy into the marine environs, comprising estuaries, which affects or is likely to result in such deleterious effects as damage to living resources and marine life, threats to human health, a hindrance to maritime activities, with fishing and other genuine uses of the sea, impairment of quality for the use of seawater and reduction of amenities]⁴⁰.

Environmental Considerations

Although the United Nations Convention on the Law of the Sea (herein referred to as "UNCLOS ") is not a conservational treaty, it frequently addresses ecological concerns. Moreover, having a whole section devoted to protecting and preserving the marine environment (Part XII), the treaty also contains many references to environmental duties and obligations throughout its many articles. The scattered placement of all environmental references makes it difficult to put together a comprehensive understanding of the duties of the are g member States granted to enforce the various provisions. And the powers Section 1 of Part XII of UNCLOS set the tone for a number of the conservational provisions laid out in the treaty. Part XII opens with Article 192: "States should preserve and protect the marine environs." This is instantly followed by Article 193: "States have the sovereign right to exploit their natural resources according to their environmental policies" [emphasis added]. Nations are then subsequently charged with generating national law to address various pollution concerns and are theoretical to employ "the best practicable means at their disposal and in accordance capabilities." ⁴¹ Article 204 entails states to observe and estimate the risks posed by pollution to the marine environs. In specific, nations are required to monitor the effects of any activities that they engage in. ⁴²

Prevention of Pollution

Article 195 entails nations to "prevent, reduce and control pollution in the marine environment." Article 195 also prohibits governments from transferring pollution to another country, directly or indirectly, or turning one type of contamination into another. The prohibition on changing one contaminant into another may impact future carbon mitigation schemes such as water-column carbon sequestration or sub-seabed sequestration. Part XII of UNCLOS also boosts nations to participate in regional agreements related to protecting the environment and

40 UNCLOS art 1 (4)

41 UNCLOS art 194

42 UNCLOS art 204

creates duties of nations to their regional counterparts⁴³. Some of the responsibilities that nations owe to other regional neighbors include the obligation to notify of imminent danger to the marine environment or actual damage from contamination.⁴⁴ Nations are cheered to work together to form regional plans for the preservation of the marine environment and develop contingency plans for answering pollution incidents and organizing with one another in data-sharing on local marine pollution, and establishing scientific criteria for the promulgation of regulations about marine pollution.⁴⁵

Dumping at Sea

Dumping is defined in Article 1 of UNCLOS as "any unhurried disposal of wastes or other matter from ships, platforms, aircraft or other man-made structures at sea" or the disposal of the ships, aircraft, platforms, or structure themselves at sea.⁴⁶ UNCLOS makes an exemption for removing incidental wastes from the normal operations of ships, aircraft, etc.⁴⁷

Article 210 of UNCLOS specifically addresses the issue of dumping and requires nations to enact their legislation on the subject. Paragraph 6 requires that national laws and regulations be at least as effective as global rules and standards. These global rules and standards are expressed in the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, which was concluded in London in 1972, the year before the start of UNCLOS III.⁴⁸

Coastal nations are acknowledged as the only authority to approve any dumping activities within their territorial seas, EEZs, or on their continental shelves.⁴⁹ Nations are given the special authority to authorize or negate such activities. Nations who authorize dumping activities must consider how other nations may be adversely affected by dumping activities in areas governed by the local nation.⁵⁰

There are three ways in which anti-dumping methods can be enforced. The first means of implementation is by a coastal nation, which has the right to implement anti-

43 UNCLOS art 197 and 201

44 UNCLOS art 198

45 UNCLOS art 199

46 UNCLOS art 1(5) (a)

47 UNCLOS art 1(5) (b) (i)

48 London Convention

49 White, M.W.D, *Marine pollution laws of the Australian Regions*, Leichardt, N.S.W. Federation Press (2000) at p.16

50 UNCLOS art 205 (5)

dumping methods within its territorial sea, its EEZ, or its continental shelf. The second means of enforcement is implementation by the Flag State, which may always enforce its laws against any violator flying its flag irrespective of where the offence occurs. The third and final means of implementing anti-dumping measures is enforcement by the third party, a nation in which vessels take on wastes within its territory. If multiple nations seem to have jurisdiction over a concern of dumping, only one is required to take on the individual case.⁵¹

3.6 CONCLUSION

The growth of the global legal framework to protect and preserve the marine environment was among the important issues at the Third United Nations Conference on the Law of the Sea (in the future UNCLOS III) and the resultant UNCLOS Convention. Part XII sets out the general and more specific rules for protecting and preserving the marine environment, including the coastal State's rights and duties to regulate vessel source pollution in its waters.

According to Article 87 of UNCLOS says about the Freedom of high seas and they are the following

1. The high seas are exposed to all States, whether land-locked or coastal.

Freedom of the high seas is applied under the conditions laid down by this

Convention and by other guidelines of international law. It includes, among other things, both for coastal and land-locked States:

(a) liberty of navigation;

(b) liberty of overflight;

(c) liberty to lay submarine pipelines and cables, subject to Part VI;

(d) sovereignty to construct artificial islands and other installations allowed under international law, subject to Part VI;

(e) liberty of fishing, subject to the conditions laid down in section 2;

(f) liberty of scientific research⁵².

51 UNCLOS art 216

52 Supra note 27

In short, these freedoms are available to all states, including coastal states, and no one can have the authority or jurisdiction over any part of it.

According to article 2 of the UNCLOS, "the sovereignty of a coastal State extends, external its land territory and internal waters then, in the occasion of an archipelagic State, its archipelagic waters, to an inline belt of sea, labelled as the territorial sea, i.e. is freedom of coastal state extend only up to territorial seas"⁵³. The coastal State exercises a quasi territorial jurisdiction in the exclusive economic zone, contiguous zone, internal waters, territorial seas and the high seas. Thus, UNCLOS gives the authority to the coastal State in the same region⁵⁴.

Even Though the coastal State has full authority over the territorial seas, some drawbacks still exist, especially relating to the adoption of environmental law. It allows innocent passage of foreign vessels, and they cannot do anything in this area, which makes the sovereignty used properly. In short, the coastal State cannot interfere in the innocent passage of foreign vessels unless and until there are clear grounds for illegal activities.

Article 19 of the UNCLOS explains the innocent passage, and the following are termed as in the guiltless passage

1. Passage is guiltless so long as it is not detrimental to the peace, good order or security of the coastal State. Such passage shall play the game with this convention and with other rules of international law.
2. Passage of a foreign vessel will be well-thought-out to be detrimental to the peace, security or good order of the coastal State if in the territorial sea it occupies in any of the following activities:
 - (a) any danger or use of force against the sovereignty, territorial integrity or political independence of the coastal State, or in any another manner in abuse of the principles of international law personified in the Charter of the United Nations;
 - (b) any exercise or practise with weapons of any kind;

53 *ibid.*

54 Anne Bardin, "Coastal State's Jurisdiction Over Foreign Vessels" (2002) 14 *Pace International Law Review* p. 29

- (c) any act intended at assembling information to the prejudice of the defence or security of the coastal State;
- (d) any act of advertising meant at disturbing the security or defence of the coastal State;
- (e) the landing, launching or taking on board of any aircraft;
- (f) the landing, launching or taking on board of any military device;
- (g) the loading or unloading of any goods, currency or person divergent to the customs, immigration, fiscal or sanitary laws and rules of the coastal State;
- (h) any act of wilful and serious pollution opposing to this Convention;
- (i) every fishing activity;
- (j) the carrying out of survey activities or research;
- (k) any act meant at interfering with any systems of communication or any other facilities or installations of the coastal State;
- (l) any other activity is not having a direct bearing on passage⁵⁵.

And the coastal states are allowed to make laws about the vessel source marine should comply with the UNCLOS and further guidelines of international law⁵⁶.

The contiguous zone is next to the seaward side of the territorial sea, not spread out beyond 24 nautical miles measured from the baselines⁵⁷. As the contiguous zone can overlap with an Exclusive Economic Zone (EEZ), foreign ships enjoy therein in principle the same high seas freedom of navigation⁵⁸. The coastal State has the authority to control the customs fiscal and immigration, and they can punish for the infringement. In the exclusive economic zone also the foreign ship has to comply with the coastal state rules and regulations like the generally accepted

55 Supra Note 27

56 Ibid

57 Ibid

58 Ibid

international regulations, procedures for safety at sea and the reduction, prevention and control of pollution from ships⁵⁹

4. PORT STATE CONTROL AND JURISDICTION IN THE CONTEXT OF PREVENTION OF VESSEL-SOURCE MARINE POLLUTION

59 Ibid

4.1 GENERAL

The expansion of port state jurisdiction by UNCLOS III is often regarded as one of the Convention's most significant features. Properly labelled, port state jurisdiction before UNCLOS III was quite limited. Jurisdiction was permitted with respect to vessels in port for offences committed to or affecting the port state's coastal waters. However, this is a type of coastal rather than port state jurisdiction.

The only true port state jurisdiction before UNCLOS III was to adjudicate cases involving vessels in port. In such instances, the port state has jurisdiction based on the vessel's presence. It could exercise that adjudicative jurisdiction even for alleged violations on the high seas or in another state's coastal waters. Port states did not need to have prescriptive jurisdiction since they could use law rules to apply foreign law. Under the transitory tort theory, a tort follows the tortfeasor and may be sued wherever the tortfeasor is found. Concerning enforcement jurisdiction, however, the rule before UNCLOS III was that port states could not exercise criminal jurisdiction for offences committed on the high seas. The port state could inspect the ship's documents to ascertain whether there had been a violation.

But if it suspected a breach had occurred, its only recourse was to report the violation to the flag state for investigation and possible prosecution; it could not institute proceedings itself.

The basis of this limitation on port state criminal jurisdiction is not altogether clear. In part, it may have stemmed from the port state's lack

of prescriptive jurisdiction over areas beyond its territorial sea; alternatively, it may have been a relic of the view that vessels are matter to the exclusive criminal jurisdiction of the flag state, except for offences that damage the peace or security of the coastal state. In any event, UNCLOS III gives port states, for the first time, authority over pollution incidents occurring on the high seas or in another state's coastal waters.

Article 218 provides that a port state may conduct inspections and institute proceedings against vessels for discharges on the high seas in violation of "applicable international rules and standards, ' it may conduct

inspections for discharge violations in another state's coastal waters, and it may bring prosecutions for such discharges at the request of the flag state, the coastal state, or any injured state.

The international discharge standards that port states may enforce according to article 218 are presumably those reflected in MARPOL.

But article 218 restricts port state enforcement jurisdiction by allowing enforcement, not of international discharge standards generally, but only of "applicable" standards. This raises the question of which international rules and standards are "applicable" and therefore enforceable by

the port state. Stated differently, if a port state wishes to prosecute a vessel for a discharge on the high seas or in another state's coastal waters, whose law would it be enforcing-its own law, the international

discharge standard, the flag state's law, or the coastal state's law?

Generally, when an international standard is adopted, it is given a particular range of applications. MARPOL, for example, states that its provisions apply to ships entitled to fly a party's flag or that operate under the authority of a party. The Paris Convention for the Prevention of Marine Pollution from Land-Based Sources, in contrast, defines

its scope of application in geographic terms. One interpretation of "applicable international rules and standards," as used in UNCLOS 111,212 is that it means those international rules and standards that, by their terms, apply to the person, vessel, or activity in question.

Under this interpretation, port state enforcement under article 218 is limited to discharge violations by vessels that are entitled to fly the flag or operate under the authority of a MARPOL party.

An alternative view is that, even if the vessel's flag state is not a party to MARPOL, MARPOL's standards could nonetheless apply to the vessel if prescribed by national law—for example, by the flag state or by the coastal state through whose waters the vessel was passing at the time of the discharge. UNCLOS III contemplates such a process by permitting flag and coastal states to prescribe national laws and regulations that affect generally accepted international rules and standards. In this indirect way, international discharge standards could become applicable to vessels they otherwise would not apply and could become enforceable by port states.

In the context of article 218, however, this interpretation appears incorrect. The term "applicable international rules and standards" does not appear to encompass international rules and standards that apply to a vessel indirectly as a result of national prescription by the flag or coastal state, where the flag state is not a party to the international convention establishing the standard. The enforcement articles of UNCLOS III consistently distinguish between enforcement of "applicable international rules and standards" on the one hand and national laws and regulations on the other. This distinction is made even concerning discharge violations in the EEZ, where coastal state laws and regulations may not go beyond international rules and standards. If an international standard became "applicable" through national prescription, these references to national laws and regulations would be redundant. Some commentators suggest an even more expansive interpretation of article 218.²¹⁹ In their view, Article 218 creates a type of universal jurisdiction, by virtue of which port states may enforce international discharge standards against any vessel, regardless of whether the flag state (or, for discharges in another state's coastal waters, the coastal state) has accepted or prescribed those standards.

This interpretation, however, presupposes that UNCLOS III gives port states prescriptive authority to extend the application of international discharge standards to vessels on the high seas. This view is open to serious questions since article 218 is in section 6 of part XII, which deals with enforcement jurisdiction, rather than section 5, which deals with prescriptive jurisdiction. The Convention, in its articles on prescriptive jurisdiction, makes no mention of universal port state jurisdiction and instead contemplates port state prescriptive jurisdiction relating only to conditions of entry into port.

The better interpretation, then, is that port state enforcement authority is limited to discharges in violation of international standards that, by their own terms, apply to the vessel in question. For example, in the case of MARPOL violations, the port state has authority if the vessel is flying the flag or operating under the authority of a party.

Nevertheless, this provision still represents an important new enforcement tool since the principal convention establishing discharge standards, namely MARPOL, has been ratified by states that account for much of the world's shipping, and hence its discharge standards are already widely applicable. Thus far, port states have only partially exercised their enforcement jurisdiction. Pursuant to their preexisting authority under MARPOL and customary international law, a number of European states have developed a cooperative port state inspection program to ensure compliance with international CDEM standards and to investigate discharge violations. But the full potential of port state inspections has not yet been realized. It might be possible, for example, to universalize the European port state inspection program, possibly under the auspices of the

IMO. Nor does it appear that port states have exercised their newfound jurisdiction under UNCLOS III over-discharge violations on the high seas. These remain possible avenues for development. Although barely eight years old, the vessel-source pollution provisions of UNCLOS III are already being called into question. At several recent negotiations, coastal state efforts to authorize more stringent environmental measures were opposed by maritime states seeking to protect traditional freedoms of navigation. Although compromise language was accepted in each case, this language essentially preserved intact the positions of both coastal and maritime states without resolving the real differences between them.

To some degree, these controversies can be viewed as disagreements that have arisen within the context of UNCLOS III as to how it should be interpreted and applied. To some degree, they may reflect dissatisfaction with the balance struck in the Convention itself. In either case, however, they demonstrate that the Convention has not laid to rest the problem of allocating jurisdictional competence among states to prescribe and enforce environmental norms. If UNCLOS III is to succeed in providing a stable ocean regime, further work is needed to spell out in concrete expressions what it permits and to develop additional international rules and standards, both substantive and jurisdictional, that address problem not resolved by the Convention.

Maritime law vests a lot of responsibility and authority to flag states⁶⁰. Hence, they are obligated to enforce the international rules and regulations concerning the safety of the ship and the safety of the marine environment⁶¹. They also need to check whether the vessels are adequately managed and operated. So in a way, it is clear that the primary responsibility to prevent the pollution from ships goes with the flag state⁶².

During the 20th century, the flag states were unable to do their obligation. There are many reasons, such as the emergence of open registries concept or flag of convenience where the old vessels and substandard ships could be quickly registered, and safety of the ships and prevention of pollution were at stake. Coastal state jurisdiction again faces a lot of uncertainty. They cannot interfere in the innocent passage of foreign vessels and could only interfere when there is reasonable concern or evidence to believe some illegal activities are happening. So the implementation power vested upon the coastal state was insufficient due to this reason.

60 Ambrose Rajadurai, "Regulation of Shipping: The Vital Role Of Port State Control" (2004) 18 Australian and New Zealand Maritime Law Journal p. 85

61 Aminuddin Md Arof and Muhammad Helmi Zulkifly, "The Effectiveness of Port State Control Regime On BulkShipping" (2012) 3 MIMET Technical Bulletin p. 1

62 Ho-Sam Bang, "Is Port State Control an Effective Means to Combat Vessel-Source Pollution? An Empirical Survey of The Practical Exercise By the Port States Of Their Powers Of Control" (2008) 23 The International Journal of Marine and Coastal Law p. 715

So the above system that was authorized to look for the safety of ships and prevention of marine pollution was a total failure. So the international community shifted their focus from flag state to Port State and there been given an abundance of power about the safety of ships and prevention of marine pollution, and again they can check whether the foreign vessel is following the rules set up by the relevant international convention.

Some of the disadvantages regarding the idea of exclusive flag State control have, to some extent, have been overwhelmed by the rights of port States given by some IMO conventions. These rights license port States to control ships lying in their ports. Moreover, it is arguable that it is customary international law that port States have the right to control if the vessels in their harbours are safe and detain them if they are not. Thus, in accordance with customary international law, European States (reacting to the Amoco Cadiz disaster) signed a Memorandum of Understanding ("MOU") on PortState Control in 1982 ("Paris MOU"). The Paris MOU offers that the participating port states maintain an effective system of port State control and also enforce compliance with the crucial international safety and pollution conventions, regardless of whether the flag State of the anxious vessel is a party to these conventions or not. The port States have the control competencies that are given by the various conventions. The Paris MOU states that each port authority has to examine a minimum of 25 per cent of the ships. 113 If deficiencies are discovered, the boat is only allowed to continue its journey after the risk has been removed. It has to be highlighted though that MOUs do not give the right to prosecute foreign vessels for non-compliance with the required standards. Port State Control enables participating port States -in cooperation with other States-to develop positive and negative lists of flag States and presentation tables for Classification Societies. These lists include information on imprisoned ships, their flags, names, and types, which is published on significant websites. An abundant part of the success of Port State Control measures is therefore based on the "name and shame" principle. 17As port State control turned out to be an effective measure to improve compliance with international covenants, other regions of the world followed the instance of the Paris MOU and accepted their own MOUs. There are presently nine regional MOUs on Port StateControl.I1s The United States of America furthermore operate a unilateral Port State Control programme. Regional MOUs gradually exchange data on inspected

ships so that significantly substandard boats have nowhere to go anymore. Moreover, the IMO started to grant technical assistance to developing MOUs in order to harmonise Port State Control activities. 119 Another noteworthy provision in the LOSC dealing with Port State Control is Article 218. It concerns the implementation of environmental ethics by port States. The provision resulted from a US suggestion in the Seabed Committee in 1973 and a more specific proposal. Some of the drawbacks regarding the concept of exclusive flag State control have, to some extent, have been overwhelmed by the rights of port States given by some IMO conventions. These rights license port States to control ships lying in their ports. Moreover, it is arguable that it is customary international law that port States have the right to control if the vessels in their harbours are safe and detain them if they are not.' 12 Thus, in accordance with customary international law, 14 European States (reacting to the Amoco Cadiz disaster) signed a Memorandum of Understanding ("MOU") on Port State Control in 1982 ("Paris MOU"). The Paris MOU provides that the participating port states maintain an effective system of port State control and also enforce compliance with the main international safety and pollution conventions, regardless of whether the flag State of the concerned ship is a party to these conventions or not. The port States have the control competencies that are given by the various conventions. The Paris MOU states that each port authority has to inspect a minimum of 25 per cent of the ships. 113 If deficiencies are discovered, the ship is only allowed to continue its journey after the hazard has been removed. It has to be emphasized though that MOUs do not give the right to prosecute foreign vessels for non-compliance with the required standards.' Port State Control enables participating port States -in cooperation with other States-to develop positive and bad lists of flag States and presentation tables for Classification Societies. These lists include information on detained ships, their flags, names, and types, which is published on significant websites. A great part of the victory of Port State Control measures is therefore based on the "name and shame" principle. As port State control turned out to be an effective measure to enhance compliance with international agreements, other regions of the world followed the instance of the Paris MOU and accepted their own MOUs. There are presently nine regional MOUs on Port State Control. The United States of America furthermore operate a unilateral Port State Control programme . Regional MOUs progressively exchange data on inspected vessels so that significantly substandard ships have nowhere to go anymore. Moreover, the IMO started to grant technical assistance to developing MOUs in order to harmonise Port State Control

activities. Another noteworthy provision in the LOSC dealing with Port State Control is Article 218. It concerns the implementation of environmental ideals by port States. The provision resulted from a US suggestion in the Seabed Committee in 1973 and a more specific proposal of several European countries in the Third Committee of the Conference at Caracas in 1974. It was anticipated that Port State Control would be a cost-effective alternative to intervention at sea by coastal States. Article 218 allows port States to undertake investigations of any discharge from a vessel "outer internal waters, territorial sea or exclusive economic zone of that State in violation of applicable international rules and standards". The provision, therefore, amounts to an extraterritorial jurisdiction of some sort. There are, however, limitations in the number of cases in which case the discharge took place in the internal waters, territorial sea or EEZ of another State. In that circumstance, proceedings shall only be instituted if the other State or the flag State requests so.

Port State plays a crucial role in substandard ships and the prevention of vessel-source marine pollution. They fill the gap of flag state's inability in the matter of substandard boats and prevention of vessel-source marine pollution. They are not still the primary authority in the above-concerned case⁶³.

4.2 PORT STATE JURISDICTION AND CONTROL

Port State control (PSC) is the scrutiny of foreign-flagged ships in national ports to confirm that ship conditions and equipment fulfil international conventions and that ships are operated in obedience to applicable international laws. The flag state is chiefly responsible for safeguarding

63 Shiming Xu, "Port State Control: Review And Assessment" (Master of Science, World Maritime University 2001) p. 2

that ship standards observe with international conventions, but PSC provides a “safety net” to recognize substandard ships. If all flag states perform their responsibilities suitably, PSC would be unnecessary. Only when flag states miss the mark to meet their guarantees does the port state become involved. Control measures sanctioned under PSC are intended to supplement national measures by flag state administrations and offer assistance to these administrations [2,3]. As a backing for flag state implementation, PSC examinations have been proven to be very useful. The International Maritime Organization (IMO) adopted Resolution A.682(17) on regional cooperation for the control of ships to promote the conclusion of regional arrangements. A craft travelling to a port in one country will typically visit other countries in the region. So, it may be more efficient if inspections are closely coordinated to focus on substandard ships and avoid multiple inspections [1]. Harmonization in PSC inspection procedures is attained through regional memoranda of understanding (MOUs), the first of which was the Paris MOU established in 1982. Then, several other regional MOUs were established. The IMO has stimulated the formation of these regional instruments for the harmonization and implementation of a global PSC regime. This was stated by the promulgation of two more solutions (Resolution A.787(19) as amended in Resolution A.882(21)) [1]. At present-day, the following nine MOUs cover virtually all seas of the world:

- ParisMOU,1982(EuropeandtheNorth Atlantic)
- TokyoMOU,1993(Asia and the Pacific)
- Acuerdo de Viña del Mar,1992
- CaribbeanMoU,1996(Caribbean)
- Mediterranean MOU,1997(Mediterranean)
- IndianOceanMOU,1998(Indian Ocean)
- Abuja MOU,1999(West and Central Africa)
- BlackSeaMOU,2000(BlackSea)
- Gulf Cooperation Council (GCC) MOU

The United States Coast Guard (USCG) executes its own PSC regime. Other authorities enforce their own PSC regimes because they have not joined any regional MOUs (so-called independent PSC regimes); for instance, since 2003, Taiwan has executed its own PSC examinations in accordance with applicable international standards recognized by competent international organizations (the IMO and the International Labor Organization (ILO)) or regional MOUs (Paris MOU and Tokyo MOU). Presently, classification societies are recognized organizations (ROs) that conduct convention mandated statutory assessments and certification on behalf of flag state administrations. Though, many substandard ships still traverse the world's oceans and do not or cannot sufficiently comply with international safety and contamination prevention criteria. PSC is a safety measure intended to compensate for the inadequacies of shipowners, classification societies, flag states, and further actors. PSC provisions are highlighted in the United Nations Convention on the Law of the Sea (UNCLOS) and all major IMO and ILO conventions. These provisions are as follows:

- UNCLOS Articles 94, 218, 219, 226, 230, and 231.
- International Convention on Tonnage Measurement of Ships, Article 12.
- International Convention for the Safety of Life at Sea Chapter I, Part B, Regulation 19, Control.
- International Convention on Load Lines, Article 21, Control.
- International Convention on Standards of Training, Certification, and Watch keeping for Seafarers, Article X, Control.
- ILO (Minimum Standards), Article 4.
- ILO Maritime Labor Convention, 2006, Article V.
- International Convention for the Prevention of Pollution from Ships, Articles 4–7.
- Annex I: Regulation 11, PSC on Operational Requirements.
- Annex II: Regulation 16, Measures of Control by Port State.
- Annex III: Regulation 8, PSC on Operational Requirements.
- Annex V: Regulation 8, PSC Operational Requirements.
- Annex VI: Regulation 10, PSC on Operational Requirements.

2. Port State Jurisdiction and Control

Port State Jurisdiction (PSJ) and Port State Control (PSC) are the two different types of legal power available to the Port state authority over the foreign vessel, unlike the Flag State. These two powers vested in the Port State Jurisdiction are almost similar, with some differences.

The Port State Control is an inspection regime to determine that the ships registered in the foreign country are in proper condition and equipped with the international laws and regulations⁶⁴. They will also be looking upon whether the ships are manned and taken adequate care of maritime security and prevention of marine pollution. So the PSC has the authority to check the foreign-registered vessels to know whether they are following the needed requirements. They are the second line of defence against the substandard ships.

In Port State Control, they give authority to the port state to check and detain a foreign registered vessel. They can impede until they are done with the corrections in the ship, and also, the PSC has the right to take the ship to the nearest port to take the necessary steps to tackle issues concerning safety.

In the above situations, the port state will not take action against the foreign vessel in the name of infringement.

Port State Jurisdictions have the authority to punish the foreign vessels that are not following the rules and regulations of the international regulations and standards. They can impose fines upon infringing the rules and prosecute the crime committed in its port or coastal state maritime zone and beyond the marine region of the state.⁶⁵

64 John Hare, "Port State Control: Strong Medicine To Cure A Sick Industry" (1997) 26 *The Georgia Journal of International and Comparative Law* p. 571

65 Ho-Sam Bang, "Port State Jurisdiction and Article 218 Of the UN Convention On The Law Of Sea(2009) 40 *Journal of Maritime Law & Commerce* p.292

Port State Control is an essential part of the Port State Authority. They go hand in hand with each other. Port State authority can function properly when the port state control is functional. They both rely on each other; that is, they are complementary to one another.

So these two legal rights work in a concept where both PSC and PSJ have to complement each other. They cannot work independently with this idea. So this Port State Control and Port State Jurisdiction together constitute Port State authority who have full power in the internal waters⁶⁶.

The entry point of Foreign Vessels to the port

The Port State authority will function from the time the foreign vessel is seen at the entrance. They will inspect the alien craft, and they will only let the non-substandard ships to the port⁶⁷. The main reason for the non-entry of this kind of ship is they are the one main reason that creates chaos in the marine environment. In the Nicaragua case, this principle was identified, where the supremacy of the coastal state to regulate accession to its port⁶⁸. So this gives a clear picture that the foreign vessels do not have any general rights to access ports specified in the international law. They can block the entry of alien ships into the harbour and impose restrictions when there are reasonable grounds.

In MARPOL and UNCLOS, these rules are specified. According to article 5(3) of the MARPOL, the port state can deny the entry of foreign vessels when they are not complying with the said convention. The Port State can also inform the concerned authorities like the consult or

66 Ho-Sam Bang, "Recommendations For Policies On Port State Control and Port State Jurisdiction" (2013) 44 Journal of Maritime Law & Commerce p. 115

67 Ibid n. 182 p. 292 "Ships not complying with the minimum standards contained in international maritime conventions and posing a significant risk of harm to seafarers on board; to other ships; and to the marine the environment has been termed substandard ships"

68 Case concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua vs the United States). I.C.J. Rep.14,111

diplomatic representative of the violated state party⁶⁹. If there is any difficulty concerning intimation, then they can advise the concerned administration regarding the same.

Article 211(3) of UNCLOS establishes particular requirements for the prevention, reduction, and control of marine environment pollution as a condition for the entry of foreign vessels into their ports or internal waters⁷⁰. Here the Port State has to take bearable measures in this issue. The state that makes conditions for the entry of foreign vessels have to notify the same. Suppose more than one state tries to harmonise the conditions of the policies. In that case, the same shall be informed to the competent international organisation part of the cooperation.

The Port State also has the authority to deny the entry of foreign vessels that are going against the rules imposed. According to article 25 (2) of UNCLOS States states that in the case of ships going on to internal waters or a call at a port facility outside internal waters, the state also has the authority to take the needed steps to prevent any break of the circumstances to which admission of those vessels to internal waters or such a call is subject⁷¹.

Article 25(2) and 211(3) of UNCLOS provides the Port State's right to control the ports⁷². Thus the foreign-flagged ship has to comply with all such rules, including the domestic rules from where the vessel was registered, followed by the regulations of the state in which they intended to travel through the territorial sea and finally, the port they need to enter. So this sums up that the foreign vessels that can skip the regulation and standards of the flag state and coastal state have to go through or is subject to inspection by the port state

69 <<http://www.marpoltraining.com/MMSKOREAN/MARPOL/intro/a5.htm>> accessed 21 august 2021

70 Supra note 27

71 Ibid

72 Ibid

So a national level arrangement can be set up by the port state to enter ships in the port. They have all the power to ask the vessel to comply with the regulation, and denial of the same will make them impose punishment.

2.2. In-Port Implementation of the Port States

According to international law, the Port State has the authority to impose enforcement measures upon the foreign-flagged ship that voluntarily enters the port. So they are under the obligation to follow the host country's laws and regulations even if the said rules are based upon the treaties to which the foreign vessel is not a signatory. It is mandatory to follow the rules and regulations of the host State by the flag state⁷³.

The Jurisdiction of In-Port Enforcement of Port State is both territorial and extraterritorial. This is because the port is a part of the state. They have full authority to exercise power anywhere in the country⁷⁴. The territorial sovereignty and customary international law allow the port state to have broad jurisdiction across the port.⁷⁵ The exercise of extraterritorial jurisdiction over the vessel is based on treaty provision. At the same time, the state will give the authority to exercise extraterritorial jurisdiction anyway. So this extraterritoriality will let the port state check the violation of foreign-flagged ships before entering the port.

According to Article 6(2) of MARPOL, a port state may examine a ship to verify whether the vessel has discharged any harmful substances in violation of the provisions of the regulations. So the inspected ship will have a certificate. This is an indicator that the foreign-flagged vessel has complied with all the requirements to be followed. The Port State can check the foreign-registered ship when this particular certificate is not available or if the certificate's validity is over.

73 Ted L. McDorman, "Port State Control: A Comment on the Tokyo Mou And Issues Of International Law" (1997)7 Asian Yearbook of International Law p. 233

74 Ted L. McDorman, "Regional Port State Control Agreements: Some Issues Of International Law" (2000) 5 Ocean and Coastal Law Journal p. 210

75 Ibid n. 179 p. 228

UNCLOS will also check the foreign vessel record or ask for documents that specify compliance with international rules and regulations. But under UNCLOS, the port state cannot only fit the documents and paper unless there are clear grounds of illegal activities such as the recordings in the document doesn't match up with the conditions of the ship or the equipment does not correspond to the papers.⁷⁶ So basically, when the documents are insufficient or lack a valid certificate, the port state will only have a physical inspection in the ship.

Article 218 gives an extensive overview of the in-Port enforcement concerning the prevention of vessel-source marine pollution. It vests the port state with an extraterritorial jurisdiction that goes beyond the general principles of international law. Through this article, the global system gives more responsibility to the port state. This significant step of giving more power to the port state will let them use their authority upon the foreign vessel even when the gravity of violation is small. This will tackle the drawbacks that are found in the flag state regarding enforcement and regulatory issues. The main motto is to have a comprehensive system of rules against the vessel source marine pollution. It will give the port state more power and judicial control concerning the infringement of laws.

According to Article 218(1), a port state may examine any discharges outside its internal waters, exclusive economic zone or territorial sea when a vessel is willingly within a port or at an off-shore terminal of that state. Port State's examination may be conducted in applicable international rules and standards recognised through the proficient international organisation or general diplomatic conference. These rules include the discharge standards in the Annexes to MARPOL 73/78 (Annex I, Regulation 8A; Annex II, Regulation 15; Annex III, Regulation 8; Annex V, Regulation 8)⁷⁷ in this aspect, and all these are accepted generally. The regulations and standards relating to the enforcement aspect of states are also concerned.

It is not necessary to perform the Port State's duty; there must be a clear violation on the part of a foreign vessel. Article 218 (1) regulates the enforcement authority of the port state basically; it also contains the authority of the port state to control discharge violations in high

⁷⁶ Supra note 27

⁷⁷ Ould Mohamed Ahmedou, "Evaluation Of Port State Control Memorandums Of Understanding: Lessons ToBe Learnt In Order To Establish An Effective PSC In West And Central Africa" (Master of Science, World MaritimeUniversity 2000) p. 10

seas or off-shore terminals of another state. In such a scenario, the coastal state can request the port state of the breach done by a foreign vessel in the high sea. And according to the article.

Article 218(2) provides that the state shall not institute a proceeding regarding discharge damage in the internal waters, exclusive economic zone or territorial sea of yet another State unless requested by that state, a State damaged or threatened by the discharge violation of the flag state. So this article allows the port state to enforce their authority upon the foreign vessel when there's or intended to violate the rules of internal waters, territorial seas or economic zone. In a nutshell, if the alien ship tends to pollute the internal waters, territorial sea or exclusive economic zone, then the port state can initiate action against them without any request, unlike the coastal state.

Article 218(3) specifies that the port state complies with requests from the flag State and any state whose nautical zones a discharge abuse is believed to have occurred. And the port state has to accept the request for investigation from the flag state whether the infringement has taken place or not. So does the coastal state ask about the internal waters, territorial seas, or exclusive economic zone?

Here the Port State has to go with the investigation request from flag state and coastal state 'as far as possible, this term does not impose strict compliance from the part of Port State, but this will give a clear idea that it is the last possible measures for the safety of the marine environment.

According to article 218(4), the investigation records done by a port State shall be communicated to the flag state or coastal state upon request. That port state can transfer the case they investigated on the coastal state's recommendation when the infringement happened on the high seas, territorial seas or exclusive economic zone. This whole process will help the investigation effectively, and the main aim of the port state is to combat the vessel source marine pollution effectively.

So the UNCLOS article gives detailed regulations regarding the in-port implementation. Article 218 will allow the port state to institute an investigation against the vessel that voluntarily enters

the port or the off-shore without any notice. The same case can be transferred to the coastal state upon their request if the same thing happens under their jurisdiction when there are reasonable grounds to believe there's pollution. Thus we can say that the working of Port State against the vessel source marine pollution is effective compared to the flag state.

The Leaving of Foreign Vessels from Port

The departure right of foreign vessels is based upon the punishment imposed by the port state or the court order. According to article 219 of UNCLOS, the port state is obliged to regulate administrative things when the foreign vessel is not following the rules set up by the international rules and standards concerning preventing vessel-source marine pollution. The case is different in the international regime; there are no specific rules in the international law regarding the enforcement measures against foreign-flagged ships concerning the commercial dispute.

So Article 219 is all about the measures relating to the seaworthiness of vessels to avoid pollution. And here, the foreign boat that does not comply with international rules and regulations that will eventually affect the marine environment will be taken to a repair place. After the shortcomings are done, they will get permission to travel.⁷⁸ So here, the flaws are termed as liability envisaged upon the ship, and the port state should take administrative measures as practicable.

So under Article 226(1)(c)-it says that if there is any threat in the ship that will eventually affect the marine environment or if they are not complying with the rules, they will be taken to the nearest repair yard. The flag state must be notified promptly about the ship's release if it is conditional or refuses to release the vessel.

⁷⁸ Supra note 27

So Article 219 is limited to administrative measures, which does not include prosecution against the concerned ship. But that will not make the organisational measures less; instead, it is a powerful weapon against preventing vessel-source marine pollution.

So the administrative measure and the action against the deficiencies in the ship, which is explicitly mentioned under Article 219 and 226(1)(c) respectively, are two important provisions concerning the prevention of vessel-source marine pollution. These administrative provisions give more powers to the working of the Port State.

4.3 REGIONAL PORT STATE CONTROL AND AGREEMENTS

In General

The Port state authority has complete control over the foreign vessels that voluntarily enter the port as clearly specified in the international law and are reluctant to use their power due to financial reasons. The flexible port authority preferred by the foreign vessel leads to competition between different ports, and eventually, the full implementation of the regulations become super relaxed.

The catastrophic oil tanker accidents demand a more comprehensive system of rules concerning the working of port state authority against vessel source marine pollution. Some European countries convened the International Maritime Organization and International Labor Organization in the year 1980 in Paris. To eliminate substandard ships and prevent marine pollution, globally accepted international conventions are properly implemented. This was taken through this particular event which was held in Paris.

Concerning the regional agreement, Paris MOU was the first regional agreement or the regional agreement model established in 1980. In the year 1992, the Latin American Agreement came into force. Followed by the American Latin Agreement, Tokyo Port State Control MOU (1993), Caribbean Port State Control MOU (1996), Mediterranean Region Port State Control MOU

(1997), The Indian Ocean MOU, the Abuja MOU, the Riyadh MOU and the Black Sea MOU came into existence⁷⁹. These agreements are regional, and they cannot set up new standards on the foreign vessels. In short, they cannot go beyond the standards set up by the international convention requirements.

PSU MOUs



So the ultimate goal of the MOU is to prevent vessel source marine pollution by eliminating the substandard ships through the harmonised system of Port Control. So they mainly focus on the requirements of the boat, whether they comply with the International rules and all.

⁷⁹ Ho-Sam Bang and Duck-Jong Jang, "Recent Developments In Regional Memorandums Of Understanding On Port State Control" (2012) 43 Ocean Development & International Law p. 171

According to the international convention, the shipowner or operator is responsible for checking whether the vessel is maintained correctly and following all the requirements. And the maritime authority should give effect to the relevant MOUs, and the concerned authorities should inspect whether they are following rules under the agreement.

4.4 EXAMINATION OF VESSELS UNDER DIFFERENT MOU'S

PARIS MOU (1982)

UNCLOS allows the port state to establish laws and regulations concerning the prevention of vessel-source marine pollution. The one who violated the said rules will be penalised. States can adopt these regulations at the regional level and impose restrictions on the foreign vessel that is not complying with said rules. Thus the UNCLOS promotes the reconciliation of policies, and the cooperative arrangement at the regional level will help tackle the consequences faced by the government.

MOUs main goal is the effective working of UNCLOS. MOU uses the legally binding international instruments to achieve the goals of UNCLOS at a regional level. Here they will inspect the ship to analyse whether they are following the rules. If any violation concerning the prevention of vessel-source marine pollution happens, they have full authority to detain the vessel.

Most of the MOUs follow the model of 1982 Paris Port State, the first MOU. So this sums up that the investigation, inspection and detention of ship procedures should comply with the Paris Port State model. The Paris MOU has been a part of several international conventions, listed in

section 2⁸⁰ , will be an effective system in the Port State to control the shortcomings in a ship that will affect the marine environment irrespective of the vessel's nationality.

The inspection method under the Paris MOU is that they will inspect the documents of foreign vessels onboard. They will physically check the vessel with a certificate, like the engine rooms and other hygiene conditions, followed by document verification. If the certificate and the condition are a mismatch, then the concerned authorities will take further action.

The detention of the ship happens when the vessel is not following the rules set up. The main agenda behind this is to tackle the defect in the boat. The vessel will not be entitled to travel unless the fault has been rectified. Here, when the vessel's detention happens, the same has to be notified to the concerned person in the vessel, be it a shipowner or the operator. Here the concerned person can approach the court for the same. When there is an alleged delay in the ship's detention, the burden of proof will be with the shipowner. So, in a nutshell, the release of the detained ship happens only when the defect is rectified. When the defect could not be cured in that particular repair yard that will be released in certain circumstances.

The Paris MOU has an outstanding feature; they will act as a medium of transferring every piece of information regarding the vessel, including the historical background, the inspection

80 "Paris MOU Section 2" "Relevant Instruments" : The International Convention on Load Lines 1966 (LOADLINES 66); the Protocol of 1988 relating to the International Convention on Load Lines 1966 (LL PROT 88); the International Convention for the Safety of Life at Sea, 1974 (SOLAS); the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT 78); the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT 88); International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and as further amended by the Protocol of 1997 (MARPOL); the International Convention on Standards of Training, Certification And Watchkeeping for Seafarers, 1978 (STCW 78); the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREG 72); the International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE 69); the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147) (ILO 147); the Protocol of 1996 to the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147) (ILO P147); the Maritime Labour Convention, 2006 (MLC, 2006); the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC 1969); Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT 1992); International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001); the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001; the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)

<<https://www.parismou.org/system/files/Paris%20MoU%2C%20including%2041st%20amendment.pdf>>
accessed 21 August 2019

outcome etc. So this will help the interest parties, including the brokers, consumers etc., why the concerned ship has been detained. So this makes the whole regional Port State Control Agreements work more efficiently.

TOKYO MOU

The emergence of MOUs makes the working of the Port State Authority more effective as their Control mechanism does not change from port to port. Such stringent laws at the regional level will help the port state authority achieve its goals without much difficulty

Tokyo Mou is an intergovernmental cooperative organisation on port state control in the Asian Pacific region. The main goal of this particular MoU is to eliminate substandard shipping in the Asian Pacific region and the Tokyo MoU endeavour to develop, to maintain an effective psc system in the Asian Pacific region, to build up the level and execution of the Mou, encouraging joint initiatives with other regional Mous and to a moderate the transparency and communication with the shipping in the industry.⁸¹

The Tokyo PSU provides transparent and timely details concerning the inspection and detention of ships to port state control

The Tokyo Mous introduced a new inspection regime in the year 2014. So here the information sheet of New inspection regime gives details regarding the profile of ship risk, ship risk profile inspection window and company performance, the flags meeting low-risk criteria, so here the flags, which are the total number of inspections over a 3-years rolling period does not reach the minimum of 30 will not be included in the Tokyo Mou Black-Grey-White list. And there is an update list which will be published on the RO's page about the criteria for a low-risk ship(High risk+Recognised by one or more Tokyo MOU members)

⁸¹ Tokyo.mou.org accessed 21 August 2021

Tokyo MOU Average Detention index and average deficiency index effective until June 30, 2020, detention index is 2.93%, and deficiency index is 2.41

INDIAN OCEAN MOU

Indian Ocean MoU came into existence in the year 1997 so as to improve the standards of Port state Control inspection in the region of the Indian Ocean⁸². The main aim of IMO is to make sure that they won't be a region for unseaworthy shipping or substandard ships which will eventually cause marine pollution⁸³. Their goal is to check upon the vessels coming to their ports that are complying with the international convention. The IOMOU provides regulations for the state parties on a wide range of issues including the enforcement of international conventions, inspection procedures, exchange of inspections, operational violation etc. Under article 2.1 of the IOMOU, the State parties are requested to enforce measures for the prevention and protection of the marine environment from vessel-source as an aid in MARPOL 73/78 and other multilateral conventions adopted by MOU.

The inspections are to be carried out on foreign vessels in order to check the validity of certificates and documents needed by the international conventions enforced by the MOU. When there is reasonable ground to believe that the vessels are not in compliance with the conventions then the port state can initiate further investigation about the structure and equipment of the ship. If the foreign ship is found to be dangerous to the marine environment, they will be blocked by the authorities and will be let go when the deficiencies are rectified by them.

82 Secretariat of the IOMOU, 'Eleventh Report of the Indian Ocean Memorandum of Understanding on PSC'(2009) page 11

83 Ibid.

RIYADH MOU

The Riyadh Memorandum of Understanding on Port State Control in the Gulf Region recognized as the Riyadh MOU came into existence in June 2004 and was signed by six nations which include Kuwait, Oman, Bahrain, Qatar, Saudi Arabia and UAE. The major goal of Riyadh MOU is to achieve safe, secure and efficient shipping in the maritime jurisdictions in the Gulf region. It is one of the major regional agreements on Port State Control that have been signed by maritime authorities under the supervision of IMO.

scrutiny which will contain at least a visit onboard a vessel to check the validity of the certificates and documents and also fulfil themselves that the crew and the total condition of the ship, its machinery spaces, equipment and hygienic condition on board and accommodation, meet the provisions of the applicable mechanisms.

3.2 Whenever there are strong grounds for believing that the condition of a vessel or its equipment or crew does not considerably meet the necessities of an appropriate instrument, a more detailed examination shall be carried out, including more checking of obedience with onboard operational conditions.

* Reference is made to IMO Assembly resolution A.787(19) on Procedures for Port State Control as may be revised by IMO.

3.3 Strong grounds exist when the Port State Control Officer (PSCO) discovers evidence that warrants a more thorough inspection of vessel, crew or equipment in his professional finding. The Authorities will in respect of strong ground, among other stuff, those mentioned in Annex 3>.

3.4 Nothing in these measures should be interpreted as restricting the Authorities' powers to take procedures within its jurisdiction in respect of any matter to which the relevant instruments relate.

3.5 The significant procedures and guidelines for control of vessels stated in Annex 2 shall also be applied.

3.6 In selecting vessels for examination, the Authorities shall give importance to the following ships:

Vessels visiting a port of a State, the Authority of which is a party to the Memorandum, for the first time or after an absence of 12 months or more;

Vessels which have been allowed to leave the port of a State, the Authority of which is a party to the Memorandum, on the condition that the shortages noted must be resolved within a stated period, upon expiry of such period;

Vessels that have been reported by pilots or port authorities as having deficiencies that may prejudice their safe navigation;

Ships whose statutory certificates on the ship's construction and equipment have not been issued following the relevant instruments;

Ships carrying dangerous or polluting goods, which have failed to report all relevant information concerning the ship's particulars, the ship's movements and concerning the dangerous or polluting goods being carried to the competent authority of the port and coastal State;

Ships that have been suspended from their class for safety reasons in the preceding six months.

3.7 The Authorities will seek to avoid inspecting ships that have been inspected within the previous 61 months by other Authorities unless there are clear grounds for inspection. These procedures do not apply to vessels listed under 3.6, which may be inspected whenever the Authority deems appropriate.

3.8 Inspections will be carried out only by a person duly authorized by his Authority to carry out Port State inspections and respond to that Authority, who fulfils the requirements of paragraph 3.10 and the qualification criteria specified in Annex 4.

3.9 The PSCO carrying out Port State Control may, if necessary, be assisted by a person or persons having appropriate expertise and approved by the Maritime Authority of the inspecting state.

3.10 The PSCO carrying out Port State Control and the person assisting him shall have no personal or commercial interest either in the port of inspection or in the ships inspected, nor shall the PSCO be employed or undertake work on behalf of non-governmental organizations which issue statutory and classification certificates or which carry out the surveys necessary for the issue of those certificates to ships.

3.11 Each PSCO shall carry a personal document in the form of an identity card issued by his authority indicating that the PSCO is authorized to carry out inspections. Reference is made to Annex 5.

3.12 On completion of an inspection, the master of the ship shall be provided by the PSCO with a document in the form specified in Annex 6 to this Memorandum of Understanding, giving the results of the inspection and details of any decision taken by the PSCO and of the corrective action to be taken by the master, owner, or operator.

3.13 The Authorities are or shall be satisfied that any deficiencies confirmed or revealed by the inspection are rectified.

3.14 In the case of deficiencies that are hazardous to safety, health, or the environment, the Authority will detain the ship or stop the operation about which the flaws have been revealed. The detention order or the stoppage of the process shall not be lifted until the hazard is removed, except under the conditions provided for in 3.17 below.

3.15 When exercising his professional judgment as to whether or not a ship should be detained, PSCO shall be guided by the criteria set out in Annex2.

3.16 If a ship is detained, the Authority shall immediately notify the Flag State concerned and its Consul or, in his absence, its nearest diplomatic representative of the action taken. Where relevant, the organization responsible for the certificate(s) issue shall also be informed.

3.17 Where deficiencies referred to in 3.14 cannot be remedied in the port of inspection. The Authority may allow the ship to proceed to another port or the nearest repair yard subject to any appropriate conditions determined by that Authority to ensure that the vessel can proceed without danger to safety, health or the environment. In such circumstances, the Authority will notify the State's competent authority where the next port of call or the repair yard is situated, the parties mentioned in 3.16 and any other Authority as appropriate. Notification to Authorities will be made by Annex 7.

The Authority receiving such notification will inform the notifying Authority of action taken.

3.18 The Authorities will take measures to ensure that ships referred to in paragraph 3.17, which either proceed to sea without complying with the conditions determined by the Authority which detained the vessel or which do not call into the agreed port or yard to undertake repairs, shall be refused access to any port within this Memorandum until the owner or operator and the flag State notify the Authority of the State where the ship was found defective or the Authority which receives the vessel that the vessel complies with all applicable requirements of the relevant instruments. In the latter case, the receiving Authority will notify all other Authorities of such compliance.

3.19 Notwithstanding provisions contained in 3.18 above, in exceptional circumstances recognized by the Authority, access to a specific port may be permitted to minimize the risk of loss of life or pollution.

3.20 The provisions of Section 3.16 and 3.19 are without prejudice to the requirements of relevant instruments or procedures established by international organizations concerning notification and reporting procedures relating to Port State Control.

3.21 When exercising control under the Memorandum, the Authorities will make all possible efforts to avoid unduly detaining or delaying a ship. Nothing in the Memorandum affects rights created by provisions of relevant instruments relating to compensation for undue detention or delay.

3.22 In case the master, owner or agent of the ship notifies the Port State Control Authorities before, upon arrival or whilst the vessel is in the port of any damage, breakdown or deficiency to the boat, its machinery and equipment, which is envisioned to be repaired or rectified before the ship sails from that port, the detention should be issued only if deficiencies justifying arrests are found after the master has given notification that the ship was ready for inspection. The same procedure applies when the Port State Control Authorities are notified that the vessel is scheduled to be surveyed at the port concerning the flag, class or statutory requirements.

3.23 In special situations, when a vessel on its way to a specified repair yard needs to call a port for temporary maintenances for safety reasons, it may be permissible into that port. All commercial operations are prohibited, except the unloading of its cargo if required for safety reasons. The ship may be permitted to proceed to the specified repair yard only if the ship's flag State has issued statutory certificates to the ship restricting their validity to that specific voyage. The Port State is satisfied that such a boat shall not pose undue risk to the ship's safety or the environment or cause undue hardship to the crew.

3.24 The owner or the operator of a ship will have the right of appeal against a detention decision to a higher administrative authority or the Court of competent jurisdiction, according to the law in each country. However, an application for appeal shall not cause the detention to be suspended.

3.25 Should an inspection reveal deficiencies warranting detention of a ship, all costs relating to reviews after the ship-owner or the operator shall cover the first. The imprisonment shall not be lifted until full payment has been made or a sufficient guarantee has been given for the reimbursement of the costs

ABUJA MOU

Abuja MoU was established on 22nd October 1999 as an intergovernmental organization comprising the Maritime Administrations of countries abutting the Atlantic coast of Africa.

Around 2,695 inspections were carried out on 2,091 individual ships. 21 of these vessels were detained for deficiencies during the year, resulting in a 50% increase in the number of detentions above 2018 figures which was 14 detentions. The detention percentage per inspection of 0.78% in 2019 gives a 34% increase above the 0.58% recorded in 2018. The spread of one deficiency for every 3.3 reviews in 2018 increased to 3.8 inspections per deficiency in 2019. The region recorded a 12% increase in inspection efforts from 2,409 in 2018 by 14 Administrations to 2,695 reviews in 2019, with the same 14 Administrations reporting.

A total of 719 deficiencies were recorded, which is lower than the 2018 . Correspondingly, the total number of 222 inspections with deficiencies is lower than the 2018. The percentage inspections-with-deficiencies of 8.24 in 2019 is an 11% decrease below the 2018 .

With respect to the categories of deficiencies, the most deficiencies were recorded on:

Safety of Navigation 108 (15.02%);
Propulsion and Auxiliary Machinery 105 (14.6%);
Living and Working conditions 85 (11.82%);
Ships' certificates and documents 61 (8.49%);
Life-saving appliances 59 (8.21%);
Fire safety 45 (6.26%);
Structural conditions 36 (5.64%);

Emergency Systems 25 (3.48%);

Radio Communications 25 (3.48%)

CARIBBEAN MOU

The Caribbean Memorandum of Understanding on Port State Control¹ (CMOU) held its 23rd Committee meeting in Grand Cayman, The Cayman Islands, from the 27th – 29th of June 2018, hosted by the Maritime Authority of the Cayman Islands (MACI).

The Caribbean MOU was signed in 1996 in Barbados and now has a complement of 17 Member States (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, France, Grenada, Guyana, Jamaica, the Netherlands, St. Christopher and Nevis, St. Lucia, Suriname and Trinidad and Tobago) and one Associate Member (St. Vincent & the Grenadines).

The Caribbean MoU has indicated that they intend to conduct a concentrated inspection campaign (CIC) on Ballast Water Management. However, there is no confirmation on which vessels will be affected or when the CIC will undergo implementation. Reports on the CIC indicate that it will run over a three-month timeframe, so initiation will likely be in the last quarter of this year.

BLACK SEA MOU

The Black Sea MOU on Port State Control is a system of harmonized inspection procedures designed to target sub-standards ships, with the main objective being their eventual elimination

At the 16th meeting of the Port State Control Committee in Batumi, Georgia, April 2015, the Memorandum of Understanding on Port State Control in the Black Sea Region (BS MOU) decided to present a New Inspection Regime for selection of vessels from 1st January 2016 to harmonize further its risk-based targeting and inspection system with the leading memorandums, namely Paris MOU and Tokyo MOU, to the highest level.

The existing ship targeting system is attuned to accommodate additional generic parameters (e.g. Flag, RO, and Company performances), weighting points for each parameter, amendment of levels of the ship risk profile and determination of the frequency of inspection of for each risk level, benefiting experience after four years of the in-depth comparative study of the foremost PSC scrutiny regimes and considering discussion at IMO on the small flags.

The BS MOU New Inspection Regime, BS-IR (2016), contains a combination of Ship Risk Profile and Time Windows to clear the order of priority in selecting ships for inspections. Black Sea Information System (BSIS) computes and displays sections 1 to 3 using check records of member authorities stored in the BSIS for members use at the time of selection of ships for inspections.

MEDITERRANEAN MOU

Within the International effort to increase Maritime Safety and the prevention of pollution and within the Euro-Med conference activities held in Barcelona on 28th of November 1995, it was declared the birth of a cooperation project sponsored by the E.C. under the umbrella of the IMO and ILO. This declaration was industrialized according to STCW 95 and the international community interest in activating the role of Port State Control to a proposed contract for southern and eastern Mediterranean countries for a Port State Control System.

This agreement was arranged through two meetings. The 1st was held in Tunisia 25-29 March 1996 and the 2nd in Casablanca, Morocco, from 10-14 December 1996.

The Third Final Preparatory Meeting on establishing a PSC Agreement in the Mediterranean region took place in Valletta, Malta, from 8 to 11 July 1997. At the end of the Conference, the

Mediterranean MOU on PSC was signed up by the Representatives of eight Countries (Algeria, Cyprus, Egypt, Israel, Malta, Morocco, Tunisia and Turkey). Late 1997 the Med. MOU was signed up by Lebanon & in July 1999 by Jordan.

2019 was a lively year for port State control in the Mediterranean region. The 10 members of the contract have carried out 5,380 examinations. The number of imprisonments was 142 in 2018 and decreased to be 95 detentions in 2019.

4. Assessment of Port State Authority in the perspective of Prevention of Vessel-Source Marine Pollution

Flag states are considered as the primary authority under international law and maritime conventions. There were given the power to check the vessels if they were fulfilling the requirements of international rules. This system was a failure because of the concept of a genuine link. Again the emergence of a flag of convenience makes the registration of substandard ships easier, which could harm the marine environment. The lack of a comprehensive legal system for flag state authority is the main reason for this.

So this inability or inefficiency of the flag state authority was the reason for the emergence of the Port State Authority. The flag State could not use their power effectively, and due to this, the catastrophic accidents increased, marine environments were at stake. So the drawback created a lot of chaos, and the whole concept of Port State Authority came into existence with more stringent rules and regulations. It was the second-line defence against the vessel source marine pollution.

The Port State authority makes the rules more comprehensive. Here the foreign-flagged vessel has to comply with all such rules and regulations of international law. Even if the ship is in the port without any notice, the port state authority can inspect and ask for a valid certificate. The

foreign vessel has to follow the laws of that particular port, and denial of that will result in the ship's detention. So this way, the port state authorities are taking a significant step in protecting the marine environment.

The diversification of power vested upon the port state makes the ship owners believe how stringent and robust the system is. Moreover, the origin of regional agreement makes the working of Port State Authority easier. This all has been a great defence concerning the prevention of vessel-source marine pollution.

The Port State authority that replaced the inefficient flag state authority was more convincing to prevent vessel-source marine pollution. They investigate if needed to detain the vessel, which has the potential to affect the marine environment. They played the role correctly.

The Maritime State also accepts the interference of the Port State concerning the Freedom of navigation. Being an economic interest party, the port state can have the right idea of prioritising and balancing the safeguard of the marine environs and trade in the maritime region.

There are some pitfalls concerning the authority of Port State. As they are given plenty of power there is no obligation has been imposed upon them. This whole system would be more successful if the authority of Port State is mandatory to combat vessel source marine pollution

The power given to the foreign vessel is significant. Their authority over the foreign-flagged ship provides the port with state authority a substantial linkage in the regulatory framework and control of trading ships globally.

But the first line control over the vessels are still vested upon the flag state awhile mean they can still check the severe injury of the ship, and at a regular interval, they can inspect the operation side of the vessel. Here the port state will effectively exercise the duty.

4.5 CONCLUSION

So port state authority plays a significant role in preventing vessel-source marine pollution and protecting the marine environment. The regional agreements make the job easy for the port state concerning the same. Even though there are several systems and authorities there to protect the marine environment. None of these can step into the port state's shoes, mainly due to the economic advantage. The lack of compliance with rules will result in significant financial trouble and may prevent trading for some time

The flag state and port state are complimenting remarkably. The most crucial goal of all this authority is to follow the laws and regulations of the international convention. When some are overburdened with a lot of work, things won't work. The same happens initially with the flag state. So it is essential to understand that the prevention of vessel-source marine pollution is not within the hands of this authority. Every single party who has been a part of this maritime community should act sensibly.

5.CONCLUSION AND SUGGESTIONS

The significance of protecting the marine environs and the prevention of marine pollution came into notice after the catastrophic tanker accidents in the 20th century. As a defensive measure, the international community vest the primary responsibility upon the flag state. Due to the overburdened work and other factors lead to the efficiency of the authority. Moreover, the flag of convenience increased the inefficiency. The coastal state which came into force to fill the gaps of the flag state was also a failure.

It has become conventional wisdom for the reason that flag states have been unwilling or unable to exercise effective jurisdiction or control over their vessels, port states have a major role in combating substandard ships and reducing vessel-source pollution.

The LOS Convention and MARPOL 73/78 require contracting states to exercise jurisdiction for protecting and preserving the marine environment from vessel source marine pollution. Flag states are obliged to adopt these conventions to protect, control, and reduce marine environment pollution from ships flying their flag or of their registry. They also give policies and guidelines on the flagging of the ships and provide proper compensation to those affected by the pollution.

The international conventions wanted the flag state to apply enforcement measures upon them to make sure that the vessels are complying with adequate standards, and this should be following LOS Convention and MARPOL 73/78

LOS Convention gives power to the coastal state to protect the marine environment from vessel source marine pollution from the exclusive economic zone, territorial sea. Above this, the coastal state may intervene in maritime casualties on high seas to reduce the threat of pollution to their marine environment.

LOS Convention and MARPOL 73/78 gives three important jurisdictional power to protect the marine environment from vessel source marine pollution, and they are port state jurisdiction to control port entry, the authority to undertake port state control and import enforcement and duty to cooperate with the port state to maintain regional standards

Port State Control (PSC) is the review of foreign ships in national ports to authenticate that the state of the boat and its tools comply with the needs of international regulations and that the boat is human-crewed and operated in obedience with these instruments and safeguard maritime safety and security and avoid pollution. PSC examinations are intended to be a backup to flag State enactment, a "second line of defence" against substandard shipping, and experience has shown that they can be extremely effective. The Organization adopted resolution A.682(17) on Regional cooperation in the control of ships and discharges, promoting regional contracts.

Numerous IMO conventions cover provisions for Governments to examine foreign ships that visit their ports to safeguard that they meet IMO standards contained in mechanisms to which the port State is a Party, taking into account the idea of no-more favourable treatment. If they do not, they can be detained or detained until repairs are carried out and be subject to targeting.

For vessels travelling to different countries in the same region, a regionally coordinated inspection that focuses on substandard ships and avoids multiple reviews can be more efficient and cost-effective to member States and provide a level playing field to ports of the region. The harmonization of PSC inspections ensures that as many substandard ships as possible are inspected and prevent boats from being subjected to multiple examinations. The primary responsibility for safeguarding ships' values rests with the flag States.

When a PSC Officer (PSCO) examines a foreign ship, any such examination should be limited to confirming that there are on board valid certificates and other significant documentation, unless there are "strong grounds" for trusting that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates.

Suppose the PSCO identifies strong grounds for trusting that the condition of the vessel or its equipment does not correspond significantly with the basics of the certificates or that the master or crew is not used to with vital shipboard procedures. In that case, a more detailed inspection should be carried out. All possible efforts should be made to evade a ship being unduly detained or delayed when exercising control.

The international community understood the whole situation, and they came to the point that the flag state and coastal state are inadequate concerning the prevention of vessel-source marine pollution. Then only the concept of Port State Authority came into existence; it acted as the second-line defence against vessel source marine pollution. They fill the gap of the flag state. Here the Port State authority has been given absolute power over the vessel in the port. They have the full authority to inspect and detain the ship. Moreover, the regional agreements strengthen the overall functioning of the ports. In a nutshell, the boat has to undergo a detailed examination to have passage through the sea.

The Port state authority is not the only one against smooth working concerning the prevention of vessel-source marine pollution. Flag State coastal and other international

conventions also have their part and role to play. One thing is clear that the Port State has a remarkable position in preventing vessel-source marine pollution, but it is not the only one. The smooth functioning concerning the prevention of vessel-source marine pollution can happen only when all the concerned authorities play their part effectively and efficiently.

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